PUNE DISTRICT GAZETTEERS

GOVERNMENT OF MAHARASHTRA, MUMBAI ORIGINALLY PRINTED IN 1885 E-BOOK EDITION 2007

DESCRIPTION

[From materials supplied by Mr. J. McL. Campbell, C. S., and Mr. W. Fletcher, Superintendent of Survey.]

Position and Area.

Poona, lying between 17° 54' and 19° 22' north latitude and 73° 24' and 75° 14' east longitude, has an area of about 5350 square miles, a population according to the 1881 census of 900,621 or about 168.40 to the square mile, and a realizable land revenue of about £115,350 (Rs. 11,53,500).

Boundaries

In the west, along the Sahyadris, Poona has a breadth of seventy or eighty miles. From this it stretches about 130 miles south-east, sloping gradually from about 2000 to 1000 feet above the sea, and narrowing in an irregular wedge-shape to about twenty miles in the east. It is bounded on the north by the sub-divisions of Akola, Sangamner, and Parner in Ahmadnagar; on the east by Parner, Shrigonda, and Karjat also in Ahmadnagar, and Karmala in Sholapur; on the south by Malsiras in Sholapur, and Phaltan, Wai, and Bhor in Satara; and on the west by Roha in Kolaba, Bhor in Satara, Pen in Kolaba, and Karjat and Murbad in Thana. Except two isolated blocks of the Bhor state, a block in the west and a smaller in the; south, the whole area within these limits belongs to Poona.

Sub-Divisions.

For administrative purposes, exclusive of the city of Poona which forms a separate sub-division, the district is distributed over eight sub-divisions. These, beginning from the north-west and working east, are, Junnar, Khed including Ambegaon, Maval, Haveli including Mulshi, Sirur, Purandhar, Bhimthadi including Baramati, and Indapur. These

eight sub-divisions have on an average an area of about 670 square miles, 150 villages, and 112,600 people.

POONA ADMINISTRATIVE DETAILS, 1881-82.

| | SQUARE | | | VILLA | AGES. | | | |
|-----------|--------|----------|------------|----------|----------|------------|----------|--|
| SUB- | | G | OVERNMEN | T. | | ALIENATED. | | |
| DIVISION. | MILES. | Vil | Villages. | | Vill | lages. | Hamlets. | |
| | | Peopled. | Unpeopled. | Peopled. | Peopled. | Unpeopled. | Peopled. | |
| Junnar | 611 | 153 | 3 | 124 | 7 | | 16 | |
| Khed | 888 | 193 | | 282 | 51 | | 58 | |
| Maval | 385 | 137 | 5 | 59 | 26 | | 12 | |
| Haveli | 813 | 179 | 4 | 155 | 58 | 1 | 32 | |
| Sirur | 578 | 60 | | 48 | 16 | | 16 | |
| Purandhar | 470 | 67 | | 66 | 25 | | 15 | |
| Bhimthadi | 1036 | 114¾ | | 76 | 151/4 | | 4 | |
| Indapur | 566 | 80 | | 63 | 6 | | | |
| Total | 5347 | 983¾ | 12 | 873 | 2041/4 | 1 | 153 | |

continued..

| SUB- SQUAR DIVISION. MILES | | VI | LLAGES. | | | | |
|-------------------------------|-----|-------------|-----------------------|-----|---------------------|---------------------------|----------------------------|
| | | 7 | TOTAL. | | POPULATION, 1881 | TO THE SQUARE MILE. | LAND REVENUE, 188-82 |
| | | Government. | Government. Alienated | | | 111221 | 100 02 |
| | | | | | | | £ |
| Junnar | 611 | 156 | 7 | 163 | 102,273 | 167 | 14,714 |
| Khed | 888 | 193 | 51 | 244 | 141,890 | 160 | 15,887 |
| Maval | 385 | 142 | 26 | 168 | 62,383 | 162 | 7586 |

| Haveli | 813 | 183 | 59 | 242 | 287,062 | 353 | 20,494 |
|-----------|------|------|--------|------|---------|-----|---------|
| Sirur | 578 | 60 | 16 | 76 | 72,793 | 126 | 13,759 |
| Purandhar | 470 | 67 | 25 | 92 | 75,678 | 161 | 9776 |
| Bhimthadi | 1036 | 114¾ | 151/4 | 130 | 110,428 | 107 | 22,935 |
| Indapur | 566 | 80 | 6 | 86 | 48,114 | 85 | 10,200 |
| Total | 5347 | 995¾ | 2051/4 | 1201 | 900,621 | 168 | 115,351 |

Aspect.

In the gradual change from the rough hilly west to the bare open east, the 130 miles of the Poona district form in the west two more or less hilly belts ten to twenty miles broad and seventy to eighty miles long. Beyond the second belt, whose eastern limit is roughly marked by a line passing through Poona north to Pabal and south to Purandhar, the plain narrows to fifty and then to about twenty miles, and stretches east for about ninety miles.

Western Belt.

The Western Belt, stretching ten to twenty miles east of the Sahyadris, is locally known as Maval or the sunset land. It is extremely rugged, a series of steppes or tablelands cut on every side by deep winding valleys and divided and crossed by mountains and hills. [These valleys are locally known as ners, mavals, and khores, and are called either after the stream or after some leading village. In Junnar all the valleys are ners, Madh-ner, Kokad-ner, Bhima-ner, and Min-ner, called after the country-town of Madh and the Kukdi, Bhima, and Mina rivers. In Khed there is Bhamner the valley of the Bhama. The Maval subdivision consists of Andhar-maval, Nane-maval, and Paun-maval, called after the river Andhra, the country-town of Nana, and the river Pauna. Further south there is Paud-khore the valley of the countrytown of Paud, and Musa-khore the valley of the Musa a tributary of the Mutha. From the valleys of the numerous streams whose waters feed the Ghod the Bhima and the Mula-Mutha, hills of various heights and forms rise terrace above terrace, with steep sides often strewn with black basalt boulders. During the greater part of the year most of the deep ravines and rugged mountain sides which have been stripped bare for wood-ash manure have no vegetation but stunted underwood and dried grass. Where the trees have been spared they clothe the hill sides with a dense growth seldom more than twenty feet high, mixed with almost impassable brushwood, chiefly composed of the rough

russet-leaved karvi Strobilanthus grahamianus, the bright green karvand Carissa carandas, and the dark-leaved anjani or iron-wood Memecylon edule. Here and there, sometimes as at Lonavali in the plain, but oftener on hill-side ledges or in deep dells, are patches of ancient evergreen forest whose holiness or whose remoteness has saved them from destruction. During the rainy months from June to October, the extreme west is very chill and damp. The people in the northern valleys are Kolis and in the southern valleys Marathas. They have a strong strain of hill blood, and are dark, wiry, and sallow. They live in slightly built houses roofed with thatch or tile, grouped in small hamlets generally on some terrace or mound, and with the help of wood-ash manure grow rice in the hollows, and hill grains on terraces, slopes, and plateaus.

Central Belt.

The Central Belt stretches ten to twenty miles east of the western belt across a tract whose eastern boundary is roughly marked by a line drawn from Pabal, about twelve miles east of Khed, south through Poona to Purandhar. In this central belt, as the smaller chains of hills sink into the plain, the valleys become straighter and wider and the larger spurs spread into plateaus in places broader than the valleys. With a moderate, certain, and seasonable rainfall, a rich soil, and a fair supply of water both from wells and from river-beds, the valleys yield luxuriant crops. Except towards the west where in places is an extensive and valuable growth of small teak, the plateaus and hill slopes are bare and treeless. Bat the lowlands, studded with mango, banian, and tamarind groves, enriched with patches of garden tillage, and relieved by small picturesque hills, make this central belt one of the most pleasing parts of the Deccan. Near Poona the country has been enriched by the Mutha canal, along which, the Mutha valley, from Khadakvasala to about twenty miles east of Poona, is green with sugarcane and other garden crops.

Eastern Belt.

East of Poona the district gradually narrows from about fifty to twenty miles and stretches nearly ninety miles east, changing gradually from valleys and broken uplands to a bare open plain. During these ninety miles the land falls steadily about 800 feet. The hills sink slowly into the plain, the tablelands become lower and more broken often little more than rolling uplands, and the broader and more level valleys are stripped of most of their beauty by the dryness of the air. The bare soilless plateaus, yellow with stunted spear-grass 'and black with

boulders and sheets of basalt, except in the rainy months, have an air of utter barrenness. The lower lands, though somewhat less bleak, are also bare. Only in favoured spots are mango, tamarind, banian, and other shade trees, and except on river banks the *babhul* is too stunted and scattered to relieve the general dreariness. The garden area is small, and as little of the water lasts throughout the year, during the hot months most gardens are bare and dry. Though it is very gradual the change from the west to the east is most complete. Bugged wooded hills and deep valleys give place to a flat bare plain; months of mist and rain to scanty uncertain showers; rice and *nagli* to millet and pulse; and thatched hamlets to walled flat-roofed villages.

Hills.

Sahyadris.

The hills of the district belong to two distinct systems. One running, on the whole, north and south, forms the main range of the Sahyadris, about seventy-three miles in a straight ling and about ninety following the course of the hills. The other system of hills includes the narrow broken-crested ridges and the bluff flat-topped masses that stretch eastwards and gradually sink into the plain, The crest of the Sahyadris falls in places to about 2000 feet, the level of the western limit of the Deccan plateau. In other places it rises in rounded bluffs and clear-cut ridges 3000 or 4000 feet high. The leading peaks are: In the extreme north, Harishchandragad whose mighty scarps, nearly 4000 feet high, support a plateau crowned by two low conical peaks. About ten miles to the south-west, at the head of the Kukdi valley and commanding the Nana pass, the massive rock of Jivdhan, its fortifications surmounted by a rounded grass-covered top, rises about 1000 feet above the Deccan plateau. About three miles south of Jivdhan, the next very prominent hill is Dhak. From the east Dhak shows only as a square flat tableland, but from the west it is one of the highest and strongest points among the battlements of the Sahyadris. Ten miles south-west of Dhak, where the direction of the Sahyadris changes from about west to about south, is the outstanding bluff of Ahupe. This rises from the Deccan plateau in gentle slopes, but falls west into the Konkan, a sheer cliff between 3000 and 4000 feet high. Eight miles south of Ahupe, and, like it, a gentle slope to the east and a precipice to the west, stands Bhimashankar, the sacred source of the river Bhima. About fourteen miles south comes a second Dhak, high, massive, and with clear-cut picturesque outline. Though its base is in

Thana it forms a noticeable feature among the peaks of the Poona Sahyadris. Five miles further south, at the end of an outlying plateau, almost cut off from the Deccan, rises the famous double-peaked fort of Rajmachi. Ten miles south, a steep slope ends westwards in a sheer cliff known to the people as the Cobra's Hood or Nag-phani, and to Europeans as the Duke's Nose. About six miles south of the Duke's Nose and a mile inland from the line of the Sahyadris, rises the lofty picturesque range known as the Jambulni hills. Further south the isolated rocks of Koiri and Majgaon command the Ambauni and Amboli passes. Six miles further is the prominent bluff of Saltar, and twenty miles beyond is Tamhini, the south-west corner of Poona.

Minor Ranges.

From the main line of the Sahyadris four belts of hills run eastwards. Of these, beginning from the north, the first and third consist of parallel ridges that fall eastwards till their line is marked only by isolated rocky hills. The second and fourth belts are full of deep narrow ravines and gorges cut through confused masses of hills with terraced sides and broad flat tops. The north belt, which is about sixteen miles broad, corresponds closely with the Junnar sub-division. It has three well-marked narrow ridges, the crests occasionally broken into fantastic peaks, and the sides sheer rock or steep slopes, bare of trees, partly under tillage and partly under grass. The north most ridge stretches from Harishchandragad along the Poona boundary and on to Ahmadnagar. South of this ridge two short ranges of about twenty miles fall into the plain near Junnar. The chief peaks in the northern spur are: Hatkeshvar, about five miles north of Junnar and more than 2000 feet above the Junnar plain, a lofty flat-topped hill, which falls east in a series of jagged pinnacles. It forms the eastern end of the spur that divides the Madhner and Kokadner valleys. About half way between Hatkeshvar and the Sahyadris, on a half-detached ridge at right angles to the main spur, is Hadsar, a great fortified mass, which with rounded top rises about 1200 feet from the plain, and ends westwards in a rocky fortified point cut off by a chasm from the body of the hill. About four miles to the south-west, quarding the right bank of the Kukdi, Chavand rises about 700 feet from the plain. It is a steep slope crested with a scarp sixty to a hundred feet high, whose fortifications enclose a rounded grassy head. Fourteen miles further east, Shivner, part of the broken ridge which separates the Kukdi and the Mina, rises from a three-cornered base about 800 feet from the plain and commands the town of Junnar. Its long waving ridge is marked for miles round by a flying arch, which stands against the sky between the minarets of a mosque. Sixteen miles south-east, isolated,

but like Chavand and Shivner marking the line of water-parting between the Kukdi and the Mina, is the ruined hill-fort of Narayangad. It has a clear-cut doable-pecked outline, the western and higher peak being crowned by a shrine. South of these, a spur, thirty-five miles long, forms the south wall of the Mina valley. South of the crest of this spur, for about fifteen miles, the second belt of eastern hills stretches a confused mass of uplands separated by abrupt gorges, their steep slopes covered in the west with evergreen woods, and in the cast, with valuable teak coppice. The slopes are broken by terraces with good soil which are cultivated in places, and their tops stretch in broad tilled plateaus which often contain the lands of entire villages. In this belt of hill-land the highest peak rises into a cone from the centre of 8 large plateau, in the Village of Nayphad, about ten miles west of Ghode. At the southern limit of this hill region, on the north of the Bhama valley, two conical hills, Shinga and Khondeshvar, rise about 4000 feet high.

The third belt like the first belt includes several spurs or ridges. Of those the five chief spurs are: the Tasobai ridge, between the Bhama and the Andhra, passing east to within a few miles of Talegaon-Dabhade; Shridepathar, twenty miles long, dividing the valleys of the Andhra and the Kundali; the Vehergaon spur; the Sakhupathar plateau, from which an offshoot with the four peaks of Lohgad, Visapur, Batrasi, and Kudva, separating the valleys of the Indrayani and the Pauna, stretches east as far as the boundary of the Haveli sub-division; and further south, within Bhor limits in the Pauna valley, the spur from which rise the two peaks of Tung and Tikona. The fourth belt of east-stretching hills is further to the south, in the Mulshi petty division, where the Mula and its seven tributaries cut the country into a mass of hills and gorges. This is almost as confused as the second belt of hills, but has fewer trees and more tillage, the hill-sides being less terraced and the hill tops narrower. South of Mulshi, a belt of the Bhor state, about twenty miles broad, ruts off Poona from the main line of the Sahvadris. Though separated from the main line of the Sahyadris the south-west of the district is not without hills. Starting 2000 feet from the plain in the scarped flat-topped fort of Sinhgad, a range of hills stretches east for seven miles, and near the Katraj pass, divides in two, one branch keeping east the other turning south-east. The eastern branch, with well-marked waving outline, stretches about fifteen miles to the fortified peak of Malhargad. From Malhargad it passes nine miles to Dhavleshvar, and from Dhavleshvar about six miles to the famous temple of Bholeshvar, Beyond Bholeshvar, for about fifty miles to near Indapur, the line is still marked by low hills, rolling clowns, and barren uplands. The second branch, after leaving the main range close to the Katraj pass, turns south-east for twelve

miles, and with several bold spurs, centres in the fortified mass of Purandhar. Out of the same mountain mass rises, from the level of the lower Purandhar fort, the fortified peak of Vajragad which commands the lower and main fort of Purandhar. Beyond Purandhar the range forms the water-parting between the Karha and the Nira rivers, and, after stretching ten miles further east, is prolonged in low bare hills and stony ridges to near Baramati. About fourteen miles east of Purandhar, above the village of Jejuri, at the end of the last ridge, of any noticeable height, is the small plateau of Kharepathar which is occupied by an ancient much venerated temple of Khandoba.

Rivers.

Poona is crossed by many rivers and streams, which take their rise in and near the Sahyadris, and, bounded by the east-stretching spurs, flow east and south across the district. The chief river is the Bhima, which crosses part of the district and for more than a hundred miles forms its eastern boundary. The main tributaries of the Bhima are the Vel and the Ghod on the left, and the Bhama, the Indrayani, the Mula or Mula-Mutha and the Nira on the right. Besides the Bhima and its feeders there are seven rivers, the Kukdi and the Mina tributaries of the Ghod, the Andhra a tributary of the Indrayani, and the Shivganga and Karha tributaries of the Nira. The Pushpavati with its feeder the Mandvi is a minor stream which flows into the Kukdi, and the Pauna is a feeder of the Mula. During the rainy season all of these rivers flow with a magnificent volume of water and during the hot season shrink to a narrow thread in broad stretches of gravel. At intervals barriers of rock cross the beds damming the stream into long pools.

Bhima.

The famous temple of Bhimashankar on the crest of the Sahyadris twenty- five miles north of Khandala, marks the source of the BHIMA. From a height of about 3000 feet above the sea, the river falls over terraces of rock some 600 feet in the first five miles. Further east, with a general course to the south-east, it flows thirty-six miles through the very narrow, and rugged valley of Bhimner. On its way it passes the large villages of Vada, Chas, and Khed, and near the village of Pimpalgaon from the right receives the waters of the Bhama, and at Tulapur the waters of the Indrayani. From Tulapur it bends to the south, skirting the Haveli sub-division, and after receiving from the left the waters of the Vel about five miles below Talegaon-Dhamdhere, it turns again north-east to Mahalungi, a point sixteen miles east of Tulapur. Then running south for about nine miles, at the village of

Ranjangaon it is joined from the right by the Mula-Mutha. This point is 1591 feet above the sea level or 475 feet below the village of Vada. From Ranjangaon the Bhima runs south-east with a winding course of about fourteen miles, till, on the eastern border of the district, it receives from the left the waters of the Ghod. After meeting the Ghod, the Bhima's course is very winding, the stream at Diksal flowing northwest for some miles. Finally at the extreme south-east corner of the district, after a deep southward bend round the east of Indapur, it is joined from the right by the Nira. The banks of the Bhima are generally low and after its meeting with the Indrayani are entirely alluvial. Here and there, where the winding stream has cut deep into the soft mould, are steep banks of great height, but in such places the opposite bank is correspondingly low. In places where a ridge of basalt throws a barrier across the stream, the banks are wild and rocky, and the water, dammed into a long deep pool, forces its way over the rocks in sounding rapids. Except in such places the bed of the Bhima is gravelly and in the fair season has but a slender stream. Here and there muddy deposits yield crops of wheat or vegetables and even the sand is planted with melons.

Vel.

The VEL rises at Dhakle in a spur of the Sahyadris near the centre of Khed. It flows south-east nearly parallel with the Bhima, and, about five miles below Talegaon-Dhamdhere, falls into the Bhima after a course of nearly forty miles.

Ghod.

The GHOD rises near Ahupe on the crest of the Sahyadris, nine miles north of the source of the Bhima, at a height of about 2700 feet above the sea. A steep winding course, with a fall of about 800 feet, brings it sixteen miles east to Ambegaon. From Ambegaon it runs east-southeast, and passing the large villages of Ghoda and Vadgaon on the north border of Khed, is joined from the left by the Mina. From here for about twenty-five miles till it receives the Kukdi, about six miles above the camp of Sirur, and for about twenty miles further till it falls into the Bhima, the Ghod with a very winding course keeps, on the whole, south-east along the Poona-Ahmadnagar boundary. Near the Sahyadris the course of the Ghod is varied and picturesque, the stream dashing over rocky ledges or lying in long still pools between woody banks. At Pargaon where it is joined by the Mina about forty-five miles from its source, the valley changes into the level plain of Kavtha, about ten miles wide, through which the Ghod flows over a

rocky bed between bare banks. The water of the Ghod is famed for its wholesomeness, a character which analysis bears out.

Bhama.

The BHAMA rises in the Sahyadris about six miles south of Bhimashankar. It winds between banks 150 feet high down the valley to which it gives the name of Bhamner, and after a south-easterly course of about twenty-four miles, falls from the right into the Bhima near the village of Pimpalgaon. The Bhama valley from its beginning about seven miles east of the Sahyadris, continues level, and gradually widens eastward for fourteen miles. The stream flows 150 feet below the cultivated lands, which are on a higher terrace.

Indrayani.

The INDRAYANI rises near Kurvande village at the head of the Kurvande pass on the crest of the Sahyadris about three miles southwest of Lonavli, and flows on the whole east through the Nane-maval and past the village of Nana till after sixteen miles it is joined on the left by the Andhra. It then enters the open country and passes twelve miles east to Dehu, a place of pilgrimage sacred to the Vani saint Tukaram. From Dehu it flows twelve miles south-east by the village of Alandi, a place of pilgrimage sacred to Dnyaneshvar, and keeping south-east for about twenty miles, turns north and meets the Bhima near Tulapur after a course of about sixty miles.

Mula-Mutha.

The MULA or MULA-MUTHA is formed of seven streams which rise a various points along the crest of the Sahyadris between eight and twenty-two miles south of the Bor pass. The united stream keeps nearly east to Lavla about five miles east of the village of Paud which gives the valley the name of Paud-khore. From Lavla, with many windings, it passes east to Poona, receiving on the way the Pauna on the left, and at Poona the Mutha on the right; and then under the name of Mula-Mutha winds east till at Ranjangaon Sandas it reaches the Bhima after a total course of about seventy miles.

Nira.

The NIRA has its source in the Bhor state in the spur of the Sahyadris which is crowned by the fort of Torna. It flows north-east till it reaches the southern border of Poona where it is joined from the north by the

Shivganga. From this it turns east and forms the southern boundary of the district, separating it from Satara, the Phaltan state, and Sholapur. It finally falls into the Bhima at the south-east corner of the district near Narsingpur after a course of about a hundred miles.

Kukdi.

The KUKDI rises at Pur, two miles west of Chavand near the Nana pass in the north-east corner of the district, and runs south-east by the town and fort of Junnar twenty-four miles to Pimpalvandi. From Pimpalvandi it flows south-east for thirty miles, passes into the Parner sub-division of Ahmadnagar, and falls into the Ghod six miles north-west of the Sirur camp on the eastern border of the Sirur sub-division. The valley of this river occupies greater part of Junnar.

Mina.

The MINA rises on the eastern slope of Dhak in the west of Junnar and flows east through the rich vale known as Minner. In the rainy season, during the first two miles of its course, the river overflows its banks and causes much damage. In the lands of the Kusur village, about fifteen miles from its source, the river is crossed by a dam known as the Tambnala dam from which a canal formerly carried water to Vaglohore where there is at present a grove of mango trees. From this the Mina flows to Narayangaon on the Poona and Nasik road, where there is another useful dam for irrigation. There is also a dam at Vaduj two miles south-east of Kusur. Past Narayangaon, where it is crossed by a good modern bridge, the Mina joins the Ghod at Pargaon, leaving the fort of Narayangad to its left.

Andhra.

The ANDHRA rises in the Sahyadris near the Savle pass, about 2250 feet above the sea. Its source is at the head of a broad valley which runs west to the crest of a scarp whose base is in the Konkan. It flows south-east along a bed 100 to 150 feet below the cultivated land, through one of the openest valleys in the district, for eighteen miles, and joins the Indrayani on its north bank near the village of Rajpuri.

Mutha.

The MUTHA, which gives its name to glen Mutha or Mutha-khore, rises in a mass of hills on the edge of the Sahyadris nearly 3000 feet above the sea. From the hill-side it enters a gorge or valley so narrow that

the bases of the hills stretch to within forty or fifth yards of the riverbank. During the first twenty miles of its count the Mutha flows through the territory of the Pant Sachiv. Immediately after entering the Poona district the current of the river is checked by the great Khadakvasla dam about ten miles further down. This dam has turned the valleys of the Mutha and of its feeders the two Musas into a lake about fifteen miles long and half a mile to a mile and a half broad. Below the dam the Mutha flows north-east past Parvati hill by the north-west limit of the city of Poona, till it joins the Mula at a point known as the meeting or sangam.

Karha.

The KARHA rises a few miles east of Sinhgad and with a south easterly course of less than sixty miles through the Purandhar and Bhimthadi sub-divisions, falls into the Nira near Songaon in the south-eastern corner of the Baramati petty division of Bhimthadi.

Shivganga.

The SHIVGANGA rises on the south slopes of Sinhgad and flows east for about six miles to Shivapur and then south for about ten miles to the Pant Sachiv's village of Nasrapur, where it is joined by the Khanind. From Nasrapur, under the name of Gunjavni, it passes southeast for about six miles and falls into the Nira near Kenjal in Purandhar.

Pushpavati.

The PUSHPAVATI rises near the Malsej pass at the north-west corner of the Junnar sub-division. It flows down Madhner by the villages of Pimpalgaon-joga and Udapur, nearly parallel to the Mina river, and joins the Kukdi at the village of Yedgaon, about eight miles east of Junnar. Near Udapur the river is known by the name of Ad.

Pauna.

The PAUNA rises on the crest of the Sahyadris south of the range of hills which forms the southern border of the Indrayani valley and includes the fortified summits of Lohogad and Visapur. It flows at first nearly east along the winding vale of Pauna or Pauna-maval, till, leaving the rugged westlands, it turns south-east, and, after a very winding course, joins the Mula from the north near Dapudi. At the

village of Ambegaon, about six miles east of its source, the bed of the Pauna is about 1820 feet, above the sea.

Lakes.

The district has no natural lakes, but six artificial lakes provide a considerable supply of water. Of the six artificial lakes two are in Haveli, at Khadakvasla and Katraj; three are in Bhimthadi, at Kasurdi, Matoba, and Shirsuphal; and one is at Bhadalvadi in Indapur, Details of these lakes are given in Chapter IV. under Irrigation.

Besides these six main lakes there are considerable reservoirs at Baur, Kambra, Khandala, Karanjgaon, Karla, Mundharva, Talegaon-Dabhade, Uksan, and Valvhan, in the Maval sub-division; at Jejuri in Purandhar; at Pashan in Haveli; at Patas in Bhimthadi; and at Indapur.

GEOLOGY

[Lieutenant-Colonel Sykes, Geological Papers on Western India, 89.115.]

Almost the whole rock of Poona is stratified trap. Beds of basalt and amygdaloid alternate, whose upper and lower planes are strikingly parallel with each other, and, as far as the eye can judge, with the horizon. Barometrical measurements and the course of the rivers show a fall in level to the east-south-east and south-east.

Terraces.

Like the rise from, the Konkan the fall eastwards from the crest of the Sahyadris is by strata or terraces. These terraces occur at much longer intervals towards the east than towards the west, and are so much lower that, particularly in the east, they escape the eye of the casual observer. In the neighbourhood of Manchar on the Ghod river, about fifteen miles north of *Khed.* five terraces rise above each other from east to west so distinctly marked that the parallelism of their planes to each other and to the horizon seems artificial. Many insulated tablelands have also an artificial character, looking like truncated cones when seen endways. Other insulated hills such as Tikona or the three-cornered in the Pauna valley, Shivner near Junnar, and Lohogad near Lonavla are triangular in their superficial planes.

Escarpments.

Mighty scarps occasionally occur in the Sahyadris, the numerous strata instead of being arranged in steps forming an unbroken wall. At the Ahupe pass, at the source of the Ghod river, the wall or scarp is fully 1500 feet high. On the other hand, the strata or steps are sometimes worn into a sharp slope. This is due to a succession of beds of Soft amygdaloid without any intervening layers of basalt whose edges weather away and leave an unbroken slope. But as a rule three or four beds of the soft amygdaloid occur between two strata of compact basalt. The soft-amygdaloid wears into a slope well suited for the growth of trees, while the hard black basalt, though its base may be buried in earth and stones from the amygdaloid above, rises from the wooded belt with majestic effect, its black front shining from the fringe of green. It is these girdles of smooth lofty basalt walls rising one within the other that make so many of the Deccan hills natural forts of amazing strength.

In the alternation of strata there is no uniformity, but as in sedimentary rocks the general level, thickness, and extent of a stratum are preserved on both sides of a valley. The basalt and hardest amygdaloids are traceable for miles in the parallel spurs or ranges, but the imbedded minerals and even the texture vary in very short distances.

Columnar Basalts.

A great geological feature of the Deccan is its columnar basalts. The basalts and hardest amygdaloids run so much into each other that except the lines of horizontal stratification, the separation is not always distinct. Prismatic disposition is more marked and perfect in the basalts than in the amygdaloids, and the more or less perfect development of determinate forms depends on the compactness and constituents of the rock. Basalts and amygdaloids, however compact, rarely form columns if they have much imbedded matter. Perfect columns are generally small, of four five or six sides, but prismatic structure sometimes shows itself in basaltic and amygdaloidal columns many feet in diameter. On the low tableland of Karde near Sirur, between sixty and seventy miles east of the Sahyadris, columnar basalt occupies an area of many square miles. Small columns occur in most of the slopes of the narrow winding valleys and on the flanks of the platforms. On many tablelands, tops or terminal planes of columns form a pavement. The perfect columns in the flanks are generally small with four five or six sides, resting on a layer of basalt or amygdaloid. In some spots the columns are separate, in others they are joined together. In a mass of columns in the face of the tableland

towards Sirur the columns are of different lengths, but spring from the same level. As the wash of monsoon torrents has swept away more Columnar Basalts, sections or articulations of the outer columns than of the inner columns, their tops form a natural flight of steps. The columns of this tableland are for the most part upright, but some of them stand at various angles, usually at 45°. Near the village of Karde they lean from the east and west towards a central upright mass. These are about fourteen feet in length and are not jointed. In a mass of columns facing the west, two miles south of the cavalry lines at Sirur, some are bent and not jointed. At Khadkala, thirty miles northwest of Poona, between Talegaon and Lohogad, a cutting for the Bor pass road shows a pile of numerous small horizontal columns. Imperfect columns occur in the rocky banks of a stream two or three hundred yards west of the village of Yevat. On the right bank they are so marked and so strange that the people worship them and paint them with red lead. Columns also occur in the watercourses near. Kadus, about ten miles west of Khed. The basalt is bluish grey and compact, vitrious in hue, and sharp in fracture. The rocky banks of the Kukdi at Jam but in Sirur about twenty-six miles south-east of Junnar, show a strong tendency to form large columns. At the west end of Sinhgad top, about 4000 feet above the sea, is a sheet of rock paved with five-cornered slabs, no doubt the ends of basalt columns. A pavement of basalt columns occurs also in the hill-fort of Harishchandragad about seventy miles north of Sinhgad; in the bed of the Mula river at Gorgaon; and in a scarp which runs into the Konkan about three miles from the Nana pass.

Basalt Balls.

Another characteristic feature of the Poona rocks is the general diffusion of basalt balls, rounded or oval masses of compact basalt with concentric layers like the coats of an onion. These concretions are usually found at the base of hills, buried in the rubbish of decomposing strata. But on the hill behind the rifle range at Poona they are scattered over a considerable area of tableland. They are abundant along the edge of the plateau near Pabal in the west of Sirur, and fine specimens occur near the village of Khadkala, thirty miles north-west of Poona, along with the level basaltic columns which have been already noticed. [In making the cutting, the, balls were either left projecting or altogether removed. The vertical sections of the nuclei in which these balls were embedded show ten to fifteen concentric layers of friable grey stone which in some instances is found to affect the needle. Specimens of the nuclei were compared with a mass brought

from the Solfatara at Naples and quite similar in aspect, colour, hardness and weight. Geological Papers on Western India, 98.]

Basalt Dikes.

The basaltic dikes of the district are all upright, and do not seem to have caused any disturbance or dislocation in the strata of basalt and amygdaloid through which they have passed. Two dikes run obliquely across the Indrayani valley, thirty-five miles north-west of Poona, and intersect each other. They are about four feet thick and cut through amygdaloidal strata. A prismatic disposition is generally observable in the fracture, and from one of them was obtained a square prism which lay at right angles to the dike. The Bor pass road, which runs through this valley to Panvel, is frequently crossed by ridges which are presumed to be the outcrops of dikes. A dike may be seen from the Poona cantonments on the southern slope of an insulated hill near the villages of Bosri and Dighi, seven and a half miles north of Poona. It is about four feet thick, has a transverse prismatic fracture, is compact, and runs from the bottom to the top of the south face of the hill, but does not show on the north slope. A similar dike occurs in a hill at Mubre, twenty miles north-west of Poona, The finest specimen is the dike which runs vertically from east to west through the hill-fort of Harishchandragad. It is first seen about 4000 feet below the crest of the scarp of six or seven feet thick on the way up the hill from Kirishvar on the south-east. It crosses the path and its prismatic fractures at right angles to its planes form a few natural steps. It can be traced for about 300 feet of perpendicular height. On the top of the hill, within the fort, about a mile to the westward, it appears at intervals cutting through basaltic and amygdaloidal strata. It passes west, but whether it appears on the western scarp is not known.

Iron-Clay.

The next distinctive feature is the occurrence of layers of red iron-clay which underlie thick strata of basalt or amygdaloid. The rock makes a red streak on paper, and does not affect the needle. It is found crumbled to dust near the basaltic columns at Sirur. In the scarps of the hill-fort of Harishchandragad and in Shivner near Junnar, famous for its rock-cut caves, red clay is found compact and homogeneous, and is, in fact, an earthy jasper. In these localities it lies under 300 to 600 feet of basalt. In Harishchandragad it is about three feet thick; in Shivner one foot.

Singular heaps of rocks and stones, twenty to seventy feet in diameter and about the same in height, occur at Patas in Bhimthadi. These are found only in the open Deccan, never in the western hilly tracts. Especially in the western hilly tracts large areas of bare sheet-rock occur. Perhaps the most remarkable examples are at Lakangaon about twenty miles from Junnar, in the Ghod valley, and in Harishchandragad. This sheet-rock abounds with narrow vertical veins of quartz and chalcedony. When of sufficient thickness, the vein splits in the centre, parallel to the surface of its walls, the interior being drusy with quartz crystals. The walls consist of layers of chalcedony, cachalong, hornstone, and semi-opal. These veins supply the majority of the siliceous minerals which are so abundantly strewed over the Deccan.

The structure and mineral composition of the Poona trap vary exceedingly within short distances, even in the same stratum. Still the predominant character does not disappear, although the basalt in a continuous bed may pass from close-grained compact and almost black to gray amygdaloidal and externally decomposing. The same observation applies to the amygdaloids. A variety of compact basalt of an intense dark colour is susceptible of a brilliant polish. It is of great weight and remarkable hardness. The natives use it to work into idols, for pedestals to the wooden columns in their mansions, and for inscription slabs. The bulls of the size of life, always placed before Shiv's temples, are cut out of this variety at the renowned Bholeshvar. Some of the pedestals in the gateway of the Mankeshvar palace at Tembhurni in the adjoining Karmala subdivision of Sholapur shine like mirrors.

In Harishchandragad quartz amygdaloid prevails. A small cellular and pisiform variety is found in the cave temples of Karla, Junnar, and the Nanaghat, all of which are excavated in basaltic or amygdaloidal strata, and some of the sculptured figures appear as if marked by small-pox. The stilbite or heulandite amygdaloid is of very common occurrence. The stone usually selected for building is of various shades of gray or bluish grey, as hornblende disseminated in very small crystals works much easier than some of the compactor basalts and takes a good polish. The temple of Bholeshvar, with its innumerable figures and laboured ornaments in deep relief, is built of this variety of trap, which is, in fact, a green-stone although less crystalline than the European greenstone. One variety which is sometimes carelessly used for building has the structure and much of the external character of the last, but in weathering peels off and the buildings fall to ruin. Such is the case with the great temple in Harishchandragad.

Two other remarkable rocks have not been noticed by authors on European geology. The first is an amygdaloid in which compact stilbite is imbedded in a vermicular form. One of its localities is the insulated hill on which stands the temple of Parvati about a mile to the south of the city of Poona. The other rock occurs as a thick stratum of amygdaloid at the height of 4000 feet in the hill-forts of Harishchandragad and Purandhar, and at the height of 1800 feet in the bed of the Ghod river near Sirur. The matrix resembles that of other amygdaloids, but the mineral imbedded is a glassy felspar in tables resembling cleavelandite crossing each other at various angles and so abundant as to form one-half of the mass.

Minerals. Natural Salts.

In digging wells in the Poona cantonment, splendid specimens of ichthyophthalmite have been found and in and near the Mula-Mutha fine specimens of heliotrope and coloured quartz occur. Common salt and carbonate of soda are also recorded from several parts of the district. Some account of the deposits is given under minerals in the Production Chapter.

CLIMATE

Its height above the sea, its freedom from alluvial deposits, and the prevalence of westerly breezes, make the climate of Poona dry and invigorating and better suited to European constitutions than most Indian climates. The air is lighter, the cold more bracing, and the heat less oppressive than in most parts of Western or Southern India.

The Poona year may be divided into three seasons: the cold season from November to February, the hot season from March to June, and the wet season from June to October. The cold season begins in November and ends in February. The coldest month is January which in 1872 showed a mean temperature of 70°. Cold land winds prevail with sea breezes mostly after sun-down.

Seasons.

The hot season may be said to begin in the middle of March and end in June, though the hot winds and the chief characteristics of the hot weather are over by the middle of May. At the beginning of the hot weather the wind blows from the east in the morning and from the west in the afternoon. In the latter part of the hot weather, except during thunderstorms, there is no easterly or land wind. The sea

breeze sets in about three in the afternoon and somewhat earlier in the extreme west. At the beginning of the hot weather the temperature rises suddenly with scorching variable winds from the north-west and west in the centre of the district, and from the east in the east of the district. Towards the end of April the temperature at Poona sometimes rises over 100°, the sun's rays being then nearly vertical for weeks. Thunderstorms occasionally break the heat but they are generally accompanied by cloudy and sultry weather. The following account of a storm which broke over Poona on the 22nd of May 1847 is taken from the Transactions of the Bombay Geographical Society, IX. 191, 192: There had been a thunderstorm the evening before, but on the 22nd the sky was clear though the air was hot and heavy. At three in the afternoon a dense mass of clouds rose in the south-east and passed to the north-west bearing about north-east from the cantonment. At half-past four the sky was still clear in the west, but in the east an arch of cumulus clouds had gathered, and, though the air was deadly still, the clouds moved rapidly west shrouding the country in gloom with unceasing lightning and thunder. Suddenly the stillness of the air was broken by a violent gust from the south-west as if the air was sucked in by the coming tempest whose front was now high overhead hurrying in a rapid scud to the west. With the first movement of the air came a heavy fall of rain and hailstones. This lasted for ten minutes. Then followed a short calm during which heavy masses of wild and broken clouds kept rolling from the north-east and drifting westward overhead. Ten or twelve minutes after the gust from the south-west had passed, the wind began anew with great force veering from the north to the north-east, then to the south-east, and finally in about twenty minutes turning back to the south-west. During these changes of wind the rain fell in torrents with very large hailstones so close that six or eight could be counted on a square foot. By a quarter to six the storm seemed nearly spent, and the sky to the east was clearing. In one hour an inch and a half of rain had fallen. Many of the hailstones were of the size of a musket-ball or a pigeon's egg, the largest falling about the middle of the storm when the wind was blowing from the north and north east. The shape of almost all was oblong and their structure concentric layers of frozen water. One was found an inch in diameter, and it must have lost some bulk in passing through the hot air near the surface of the earth. At the beginning of the storm the thermometer was at 90° in the house, in half an hour it went down to 78°, and when the storm was over it stood at 72°. The dew point had been 74° in the morning, it rose to 78° by four, and again fell to 68°. By six the tempestuous clouds had passed, but still hung across the western half of the heavens with unceasing lightning and thunder. During the hot season the air is

darkened by a dry haze. April and May, though the hottest, are not the dryest months. The sun beating on the ocean in the middle of March raises large masses of vapour which continue to increase as the sun passes north The westerly winds carry this vapour across the Konkan and over the west Deccan. In the western hills, from about the tenth of May, the vapour begins to condense in the cool of the evening in heavy dews and refreshing mists, and over the centre and east it gathers in great thunderclouds. In the east and centre of the district, sometimes early in May, but as a rule not till towards the close of the month, after three or four oppressive days, in the afternoon clouds gather in the east in great masses, and with a strong blast from the north-east drive west with thunder and heavy rain.

Rainfall.

Over the whole district the chief supply of rain is from the south-west monsoon which begins about the middle of June and lasts till the end of September. The returns show such marked variations from year to year at the different rain stations and such great differences in the average fall at stations at no great distance apart, that it is difficult to divide the district according to its rainfall. [The rain returns must be received with caution. In some stations little more than a beginning of accurate registration has been made. During the five years ending 1881 the average rainfall at Baramati and at Indapur in the extreme east has been as high as the fall in most parts of the district except close to the Sahyadris. But the returns for a long series of years show that, though in some seasons it is sufficient and occasionally abundant, the fall in the east of the district is uncertain. This supports the usual local division of the district into three belts, a western belt varying from about twelve miles in breadth in the north to about twenty-four in the south, whose eastern limit passes through Junnar, Ghode, Khed, Talegaon-Dabhade, and Singhad, with a heavy and certain rainfall; a central belt, with an average breadth of about twenty miles, the eastern limit passing through Ana, Bela, Pabal, Loni, Sasvad, Jejuri, and Valhi, with a moderate but regular rainfall; and the long tongue of land that stretches east from this line to Indapur with an uncertain and irregular rainfall.

For the twenty-one years ending 1881 returns are available for Khadkala and Paud in the western belt; for Junnar, Ghoda, Khed, Poona, and Sasvad in the central belt; and for Sirur, Supa, Baramati, and Indapur in the eastern belt. In the western belt, at Khadkala, which is about eleven miles east of the Sahyadris and twenty-five miles north-west of Poona, during the ten years ending 1870 the fall

varied from 95 inches in 1863 to 12 inches in 1861 and averaged about 60 inches, and during the eleven years ending 1881 it varied from 116 inches in 1875 to 36 inches in 1880 and averaged 60 inches; and Paud, which is about fifteen miles east of the Sahyadris and fifteen miles west of Poona, during the ten years ending 1870 varied from 77 inches in 1861 to 36 inches in 1867 and averaged 52 inches, and during the eleven years ending 1881 varied from 88 inches in 1875 to 37 in 1877 and averaged 54 inches. In the central belt, Junnar, which is about twelve miles east of the Sahyadris and forty-five north of Poona, during the ten years ending 1870 varied from 10 inches in 1862 to 35 inches in 1861 and averaged 22 inches, and during the eleven years ending 1881 varied from 13 inches in 1873 to 39 in 1878 and averaged 22 inches; Ghoda, which is eighteen miles from the Sahyadris and thirty-five north of Poona, during the ten years ending 1870 varied from 13 inches in 1862 to 39 in 1861 and averaged 23 inches, and during the eleven years ending 1881 varied from 12 inches in 1872 to 36 in 1878 and averaged 23 inches; Khed, which is about twenty-five miles east of the Sahyadris and twenty-five north of Poona, during the ten years ending 1870 varied from 13 inches in 1864 to 33 in 1870 and averaged 22 inches, and during the eleven years ending 1881 varied from 15 inches in 1872 to 32 in 1878 and averaged 23 inches; Poona, which is about thirty-two miles east of the Sahyadris, during the ten years ending 1870 varied from 17 inches in 1864 to 47 in 1861 and averaged 29 inches, and during the eleven vears ending 1881 varied from 15 inches in 1876 to 38 in 1875 and averaged 27 inches; and Sasvad, which is about thirty miles east of the Sahyadris and fifteen south-east of Poona, during the ten years ending 1870 varied from 2 inches in 1863 to 34 in 1869 and averaged 14 inches, and during the eleven years ending 1881 varied from 15 inches in 1880 to 38 in 1878 and averaged 21 inches. In the eastern belt, Sirur, which is about sixty-two miles east of the Sahyadris and thirty-six miles north-east of Poona, during the ten years ending 1870 varied from 10 inches in 1862 to 31 in 1861 and averaged 19 inches, and during the eleven years ending 1881 varied from 11 inches in 1876 to 24 in 1878 and averaged 17 inches; Supa, which is about fifty-five miles east of the Sahyadris and about thirty-five miles southeast of Poona, during the ten years ending 1870 varied from 5 inches in 1863 and 1865 to 30 in 1861 and averaged 10 inches, and during the eleven years ending 1881 varied from 6 inches in 1876 to 26 in 1878 and averaged 17 inches; Baramati, which is about sixty miles east of the Sahyadris and fifty south-east of Poona, during the ten years ending 1870 varied from 2 inches in 1861 to 27 in 1869 and averaged 16 inches, and in the eleven years ending 1881 varied from 8 inches in 1876 to 29 in 1878 and averaged 19 inches; and Indapur,

which is about ninety miles east of the Sahyadris and twenty-five south-east of Poona, during the ten years ending 1870 varied from 3 inches in 1863 to 26 inches in 1869 and averaged 13 inches, and in the eleven years ending 1881 varied from 5 inches in 1876 to 29 inches in 1878 and averaged 21 inches. The following are the details:

POONA RAIN RETURNS, 1861 - 1881.

| STATION. | FROM THE SAHYADRIS. | 1861. | 1862. | 1863. | 1864. | 1865. | 1866. | 1867. | 1868. | 1869. | 1870. | TEN YEARS. |
|----------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| | Miles. | In. |
| Khadkala | 11 | 12 | 63 | 95 | 50 | 65 | 66 | 50 | 77 | 57 | 66 | 60 |
| Junnar | 12 | 35 | 10 | 17 | 15 | 20 | 24 | 26 | 25 | 25 | 30 | 22 |
| Paud | 15 | 77 | 53 | 56 | 44 | 46 | 59 | 36 | 51 | 39 | 61 | 52 |
| ghoda | 18 | 39 | 13 | 15 | 14 | 21 | 24 | 26 | 23 | 27 | 29 | 23 |
| Khed | 24 | 28 | 21 | 15 | 13 | 17 | 20 | 21 | 26 | 29 | 33 | 22 |
| Sasvad | 30 | 4 | 3 | 2 | 2 | 4 | 25 | 21 | 17 | 34 | 30 | 14 |
| Poona | 32 | 47 | 27 | 23 | 17 | 31 | 19 | 27 | 51 | 29 | 41 | 29 |
| Supa | 52 | 30 | 14 | 5 | 8 | 5 | 6 | 21 | 10 | 23 | 26 | 10 |
| Baramati | 62 | 2 | | | | | | 21 | 14 | 27 | 21 | 16 |
| Sirur | 66 | 31 | 10 | 17 | 15 | 21 | 18 | 20 | 14 | 18 | 26 | 19 |
| Indapur | 90 | 23 | 12 | 3 | 10 | 6 | 5 | 20 | 8 | 26 | 24 | 13 |

| STATION. | 1871. | 1872. | 1873. | 1874. | 1875. | 1876. | 1877. | 1878. | 1879. | 1880. | 1881. | ELEVEN YEARS. |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
| | In. |
| Khandkala | 66 | 79 | 68 | 92 | 116 | 77 | 51 | 73 | 57 | 36 | 58 | 60 |
| Junnar | 27 | 15 | 13 | 25 | 84 | 17 | 17 | 39 | 36 | 18 | 22 | 22 |
| Paud | 46 | 51 | 50 | 57 | 88 | 51 | 37 | 66 | 65 | 46 | 47 | 54 |
| Ghoda | 22 | 12 | 13 | 28 | 36 | 17 | 21 | 36 | 35 | 16 | 24 | 23 |
| Khed | 24 | 15 | 22 | 29 | 31 | 18 | 17 | 32 | 39 | 22 | 22 | 23 |
| Sasvad | 21 | 15 | 18 | 31 | 22 | 18 | 19 | 38 | 24 | 15 | 19 | 21 |
| Poona | 27 | 22 | 32 | 38 | 38 | 15 | 20 | 33 | 34 | 20 | 25 | 27 |

| Supa | 22 | 19 | 14 | 26 | 15 | 6 | 15 | 26 | 20 | 16 | 12 | 17 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| Baramati | 17 | 21 | 10 | 26 | 10 | 8 | 27 | 29 | 26 | 19 | 19 | 19 |
| Sirur | 17 | 22 | 18 | 15 | 16 | 11 | 15 | 24 | 17 | 19 | 19 | 17 |
| Indapur | 15 | 26 | 14 | 27 | 21 | 5 | 28 | 29 | 21 | 18 | 25 | 21 |

Source of Rain Supply.

Special returns compiled by Mr. Moore, the Collector of Poona, for the five years ending 1882, separate the three sources of rain supply, the easterly thunderstorms in May, the south-west rain between June and the end of September, and rain from the north-east in October at the beginning of the north-east monsoon. The average supply from the easterly thunderstorms in May varied from 2.79 in Poona to 1.06 at Khadkala and to 0.50 at Lonavla on the crest of the Sahyadris; the south-west supply varied from 138.80 at Lonavla and 49.91 at Khadkala to 9.83 at Kedgaon about thirty miles east of Poona; and the October north-east supply varied from 5.96 inches at Baramati about fifty miles south-east of Poona, to 2.82 inches at Kasurdi about twenty-four miles east of Poona. These returns, which are from twenty stations, seem to show that local causes, probably the neighbourhood of hills and rivers, greatly modify the general influences which would make the supply of south-west rain decline with the increasing distance from the western limit of the district and would make the east and north-east supplies decline with increasing distance from the east of the district. As regards the early or eastern rainfall in May, of the western stations Lonavla is 20 or last in the list, Khadkala is 19, and Paud 16; of the central stations Junnar is 14, Khadakvasla 12, Khed 10, Jejuri 9, Sasvad 4, Talegaon-Dabhade 2, and Poona 1; and of the eastern stations Kasurdi is 18, Talegaon-Dhamdhere 17, Sirur 15, Indapur 13, Supa 11, Patas 8, Kedgaon 7, Baramati 6, Sirsuphal 5, and Uruli 3. As regards the south-west rainfall, of the western stations, Lonavla is 1, Khadkala 2, and Paud 3; of the central stations, Talegaon-Dabhade is 4, Khadakvasla 5, Junnar 6, Poona 7, Khed 8, Jejuri 10, and Sasvad 12; and of the eastern stations, Indapur is 9, Baramati 11, Patas 13, Sirur 14, Sirsuphal 15, Talegaon-Dhamdhere 16, Supa 17, Uruli 18, Kasurdi 19; and Kedgaon 20. As regards the northeast October rain, of the western stations, Lonavla is 3, Khadkala 7, and Paud 17; of the central stations, Poona is 5, Khadakvasla 6, Jejuri 10, Khed 12, Sasvad 13, Talegaon-Dabhade 16, and Junnar 19; and of the eastern stations, Baramati is 1, Indapur 2, Sirur 4, Kedgaon 8, Supa 9, Patas 11, Sirsuphal 14, Talegaon-Dhamdhere 15, Uruli 18, and Kasurdi 20. The details are:

POONA RAIN RETURNS.

| STATION. | | ST IN. | | SOUTH-WEST RAIN. | | NORTH-EAST RAIN. | | |
|------------------------|-----|-----------|-----------------------|---------------------|----------------------|---------------------|-----|-----|
| STATION. | MA | λΥ. | JUNE TO SEPTEMBER. | | OCTOBER TO NOVEMBER. | | TOT | AL. |
| | In. | Ct. | In. | Ct. | In. | Ct. | In. | Ct. |
| Lonavla | 0 | 50 | 138 | 80 | 5 | 64 | 144 | 94 |
| Khadkala | 1 | 6 | 49 | 91 | 4 | 20 | 55 | 17 |
| Paud | 1 | 25 | 48 | 2 | 3 | 9 | 52 | 36 |
| Talegaon- Dabhade | 2 | 66 | 31 | 25 | 3 | 27 | 37 | 18 |
| Khadakvasla | 1 | 54 | 22 | 87 | 4 | 23 | 28 | 64 |
| Poona | 2 | 79 | 19 | 20 | 4 | 29 | 26 | 28 |
| Junnar | 1 | 35 | 21 | 60 | 2 | 97 | 25 | 92 |
| Baramati | 2 | 15 | 16 | 64 | 5 | 96 | 24 | 75 |
| Indapur | 1 | 50 | 17 | 21 | 5 | 77 | 24 | 48 |
| Khed | 1 | 59 | 18 | 81 | 3 | 96 | 24 | 36 |
| Jejuri | 2 | 5 | 17 | 20 | 4 | 1 | 23 | 26 |
| Sasvad | 2 | 34 | 16 | 41 | 3 | 87 | 22 | 62 |
| Patas | 2 | 6 | 16 | 1 | 3 | 97 | 22 | 4 |
| Sirur | 1 | 26 | 14 | 24 | 4 | 47 | 19 | 97 |
| Sirsuphal | 2 | 33 | 13 | 70 | 3 | 61 | 19 | 64 |
| Supa | 1 | 58 | 12 | 49 | 4 | 9 | 18 | 16 |
| Uruli | 2 | 47 | 11 | 58 | 3 | 3 | 17 | 8 |
| Talegaon- Dhamdhere | 1 | 10 | 13 | 30 | 3 | 28 | 17 | 68 |
| Kedgaon | 2 | 11 | 9 | 83 | 4 | 19 | 16 | 13 |
| Kasurdi | 1 | 9 | 11 | 20 | 2 | 82 | 15 | 11 |

Poona Rainfall.

In the city of Poona during the twenty-six years ending 1881 the yearly rainfall has varied from 20 to 57 and averaged 29 inches. The details are:

POONA CITY YEARLY RAINFALL, 1856-1881

| YEAR. | Inches. | YEAR. | Inches. | YEAR. | Inches. | YEAR. | Inches. |
|-------|---------|-------|---------|-------|---------|-------|---------|
| 1856 | 21 | 1863 | 26 | 1870 | 37 | 1877 | 20 |
| 1857 | 28 | 1864 | 22 | 1871 | 28 | 1878 | 33 |
| 1858 | | 1865 | 34 | 1872 | 22 | 1879 | 34 |
| 1859 | 41 | 1866 | 23 | 1873 | 26 | 1880 | 20 |
| 1860 | 39 | 1867 | 30 | 1874 | 39 | 1881 | 25 |
| 1861 | 57 | 1868 | 38 | 1875 | | | |
| 1862 | 33 | 1869 | 27 | 1876 | | | |

Information [These details of rainfall and temperature (18.28) are taken from Chambers' Meteorology of the Bombay Presidency, 131-167.] compiled by Mr. Chambers shows that in Poona city, during the seventeen years ending 1872, the average monthly fall of rain varied from 0.29 in December to 6.89 in July. The details are:

POONA CITY MONTHLY RAINFALL, 1856-1872.

| Month | Inches. | MONTH. | Inches. | MONTH. | Inches | MONTH. | Inches. |
|----------|---------|--------|---------|------------|--------|----------|---------|
| January | .43 | April | .56 | July | 6.80 | October | 5.54 |
| February | .06 | May | 1.56 | August | 5.09 | November | .52 |
| March | .31 | June | 6.19 | September. | 4.65 | December | .29 |

During the same period the average number of rain days varied from 0.2 in February to 20.1 in July. The details are:

POONA CITY RAIN DAYS, 1856-1872.

| MONTH. Days. MONTH. Days. | MONTH. | Days. | MONTH. | Days. |
|---------------------------|--------|-------|--------|-------|
|---------------------------|--------|-------|--------|-------|

| January | 0.5 | April | 1.5 | July | 20.1 | October | 7.4 |
|----------|-----|-------|------|------------|------|----------|-----|
| February | 0.2 | May | 3.5 | August | 19.8 | November | 1.7 |
| March | 1.0 | June | 14.2 | September. | 10.4 | December | 0.9 |

The greatest fall recorded in any one day in each month varied from 7.90 inches in October to 0.66 inches in February. The details are:

POONA CITY GREATEST RAIN DAYS, 1886-1872.

| MONTH. | Inches. | MONTH | Inches. | MONTH. | Inches. | Month. | Inches. |
|----------|---------|-------|---------|------------|---------|----------|---------|
| January | 4.68 | April | 2.10 | July | 3.56 | October | 7.90 |
| February | .66 | May | 3.15 | August | 2.80 | November | 1.60 |
| March | .90 | June | 5.00 | September. | 3.32 | December | 1.08 |

Temperature.

The two daily observations taken at the Poona observatory at 9-30 A.M. and 3-30 P.M. show for the nineteen years ending 1874 a mean temperature of 79.5°. The greatest excess of temperature was 1.0° in 1869 and the greatest decrease was 1.0° in 1861. The details are:

POONA CITY MEAN TEMPERATURE, 1856-1874.

| Year. | Mean. | Above General Mean. | Year. | Mean. | Above General Mean. | Year. | Mean. | Above General Mean. |
|-------|-------|---------------------------|-------|-------|---------------------------|-------|-------|---------------------------|
| 1856 | 80.1 | +0.6 | 1863 | 78.7 | -0.8 | 1870 | 79.2 | -0.3 |
| 1857 | 79.1 | -0.4 | 1864 | 78.7 | -0.8 | 1871 | 79.9 | +0.4 |
| 1858 | | 1 | 1865 | 79.8 | +0.3 | 1872 | 80.2 | +0.7 |
| 1859 | 80.3 | +0.8 | 1866 | 80.0 | +0.5 | 1873 | 79.7 | +0.2 |
| 1860 | 79.6 | +0.1 | 1867 | 79.6 | +0.1 | 1874 | 78.8 | -0.7 |
| 1861 | 78.5 | -1.0 | 1868 | 80.3 | +0.8 | | | |
| 1862 | 79.0 | -0.5 | 1869 | 80.5 | +1.0 | | | |

At the Poona observatory, which is in the hospital building to the south of the Vanavdi barracks, besides rainfall, thermometer and barometer readings have been recorded since 1851. The observations are under the charge of the senior medical officer. The record comprises two sets of observations made every day at 9.30 A.M. and at 3.80 P.M., and a complete set of twenty-four hourly observations for one day in every month. The instruments and phenomena noted at each observation include the barometer, dry and wet bulb thermometers, the direction of the wind, the cloudiness, and the rainfall. Once a day the maximum and minimum thermometer readings in the shade, the maximum thermometer readings exposed to the sun's rays at day time, and the minimum thermometer readings laid upon grass exposed to the sky at night are recorded. The observations are registered on printed forms which when filled are forwarded by the head of the medical department to the Superintendent of the Colaba Observatory in Bombay where the calculations are checked and the results compiled. Once a year the registers and compilation are sent by the Superintendent to Government to be forwarded to Her Majesty's Secretary of State for India. The Poona observatory has latticed doors at the north and south ends to admit the air. The thermometers are fixed on horizontal blocks of wood projecting from the wall with their bulbs about 11/2 inches off the wall and about five feet from the ground.

The adopted monthly and annual mean temperatures of the three stations of Poona, Kirkee, and Purandhar, and the ranges between the greatest and least monthly means, are shown in the following table:

POONA TEMPERATURE.

| STATION. | Jan. | Feb. | March. | April. | May. | June | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Annual Mean | Range. |
|-----------|------|------|--------|--------|------|------|-------|------|-------|------|------|------|----------------|--------|
| Poona | 71.4 | 75.0 | 80.5 | 84.6 | 83.7 | 78.9 | 75.5 | 74.4 | 75.0 | 76.6 | 74.6 | 71.7 | 76.8 | 13.2 |
| Kirkee | 71.0 | 75.0 | 81.0 | 81.5 | 82.5 | 78.5 | 77.0 | 75.0 | 75.0 | 80.0 | 77.0 | 71.0 | 77.0 | 11.5 |
| Purandhar | 67.1 | 71.7 | 75.1 | 77.0 | 72.8 | 70.3 | 67.3 | 65.9 | 67.2 | 69.6 | 67.7 | 64.2 | 69.7 | 12.6 |

An examination of the temperature returns in the city of Poona for the nineteen years ending 1874 shows that during four months in the year, March April May and June, the temperature was above, and that during the eight rainy months the temperature was below the mean.

Adopting the return corrected for the daily inequality, January was the coldest month with an average of 5.4° below the mean, December came next with 5.0°, August third with 2.4°, November fourth with 2.2°, September and February fifth and sixth with 1.8° each, July seventh with 1.3°, and October eighth with 0.2°. Of the four hot months June is the coolest with 2.1° in excess of the mean; March comes next with 3.7°, May next with 6.9°, and April is the hottest, being 7.8° above the mean. The details are:

POONA CITY MONTHLY TEMPERATURE, 1856-1874.

| MONTH. | 9-30 A.M. and 3-30 P.M. | Corrected. | MONTH. | 9-30 A.M. and 3-30 P.M. | Corrected. |
|----------|-------------------------------|------------|-----------|-------------------------------|------------|
| January | -5.0 | -5.4 | July | -2.5 | -1.3 |
| February | -1.3 | -1.8 | August | -3.7 | -2.4 |
| March | +4.1 | +3.4 | September | -2.6 | -1.8 |
| April | +9.1 | +7.8 | October | -0.3 | -0.2 |
| May | +8.1 | +6.9 | November | -2.4 | -2.2 |
| June | +1.6 | +2.1 | December | -5.1 | -5.1 |

The corrections are found from the daily inequalities at the several hours in each month. They are the means of these inequality for the hours 9 A.M. and 10 A.M. and 3 P.M. and 4 P.M. and are applied subtractively.

The following table shows for the city of Poona, for each month, for the monsoon quarter June to August, and for the whole year, the excesses of the mean temperature at the several hours of the day above the mean temperature of the twenty-four hours; also the number of complete days observations which are generally not more than one in each month of the year from which the means are derived:

POONA TEMPERATURE, IN LOCAL CIVIL HOURS, 1856-1874.

| MONTH. | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---------|----------|----------|----------|-----|-----|----------|------|------|------|------|------|------|
| January | _ 7.6 | _ 7.1 | — 6.1 | 3.0 | 1.0 | + 2.1 | +4.7 | +6.9 | +8.1 | +8.7 | +8.3 | +7.0 |

| - | | | | | | | | | | , | | | | | | |
|-------------------|----------|-----|--------|----------|----------|----------|------|---------|--------------|-----------|----------|----------|----------|----------|----------|--------------|
| February | _ 8.7 | 8. | 3 | _ 7.3 | 4.1 | 0.7 | 2. | + 5 | + 4.6 | +6.5 | 5 +8 | 3.2 | +8 | .6 | +8.6 | +8.3 |
| March | _ 8.2 | 7. | _ 7 | — 6.2 | 3.5 | 0.2 | | + 8 | + 5.1 | +7.3 | 3 +8 | 3.9 | +8 | .8 | +8.5 | +7.5 |
| April | _ 7.7 | 6. | _ 5 | _ 4.3 | _ 1.9 | + 1.1 | +3.8 | 8 | + 6.2 | 7.9 | +8 | 3.7 | +8 | .9 | +8.0 | +6.5 |
| May | _ 6.6 | 5. | 6 | _ 3.9 | 1.6 | + 1.7 | +3. | 7 + | ⊦5. 7 | 7.3 | + 7 | 7.8 | 7 | + .9 | + 7.3 | +6.1 |
| June | _ 2.3 | 1. | - 6 | — 8.0 | +0.4 | + 1.8 | +2. | 7 + | +3.5 | +3.8 | 3 +4 | 4.1 | +3 | .6 | +2.8 | +2.1 |
| July | _ 1.6 | 1. | - 4 | _ 0.5 | +0.2 | 1.2 | 2.0 | + 0 | + 2.7 | +2.7 | 7 2 | + 2.7 | +2 | .6 | +2.0 | +1.1 |
| August | _ 2.1 | 1. | 7 | _ 1.1 | 0.3 | +0.6 | 1.4 | + 4 | ⊦2.2 | + 2.7 | +3 | 3.1 | +3 | .0 | +2.3 | +1.7 |
| September | _ 3.2 | 2. | 5 | _ 1.7 | 0.4 | + 1.1 | 2.2 | + 2 | ⊦3.2 | 4.1 | - - 2 | + 4.0 | 3 | + .6 | + 3.2 | +2.3 |
| October | _ 5.7 | 5. | _ 3 | — 4.0 | _ 1.6 | +0.7 | +2.0 | 6 + | ⊦4.2 | + 5.5 | +6 | 5.0 | 6 | .0 | +5.5 | +4.4 |
| November | _ 7.2 | 7. | - 1 | _ 5.4 | | | | | | | | | | .7 | +6.3 | |
| December | _ 7.8 | 7. | - 4 | — 6.2 | 3.3 | 0.6 | +2.0 | 6 | + 4.9 | + 6.4 | | + 7.1 | 7 | + .5 | + 7.4 | +6.7 |
| June to August | _ 2.0 | 1. | - 6 | — 0.8 | +0.1 | + 1.2 | +2.0 | 0 | + 2.8 | + 3.1 | - 3 | + 3.3 | +3 | .1 | + 2.4 | +1.6 |
| Year | _ 5.8 | 5. | _ 2 | — 4.0 | 2.0 | +0.1 | 2. | + 5 | ⊦4.3 | +5.5 | 5 +6 | 5.2 | +6 | .3 | +5.8 | + 4.9 |
| MONTH. | 1 | 8. | 1 | LO | 30 | 21 | 22 | 23 | 3 0 | 1 | 2 | S | 4 | 5 | | plete ys. |
| January | +! | 5.6 | + | 3.9 | +2.8 | +1.6 | +0.2 | _ 0. | - — 72.0 | _ 3.04 | _ .86 | _ 5.7 | _ 8.0 | _ 8.1 | . 2 | 20 |
| February | | | | | | +1.3 | | | | | | | | | | 20 |
| March | | | | | | . 0 - | _ | _ | - — | 3.94 | _ | _ | _ | _ | _ | 21 |

| April | +4.5 | +2.1 | +0.4 | _ 0.5 | _ 1.3 | _ 2.3 | — 3.3 | _ 4.4 | _ 5.1 | — 6.0 | _ 7.2 | _ 7.5 | 21 |
|----------------|------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|
| May | +3.6 | +1.5 | +0.7 | _ 1.0 | _ 1.6 | _ 2.4 | _ 3.3 | _ 4.2 | _ 4.8 | _ 5.7 | _ 6.5 | _ 6.7 | 21 |
| June | +0.8 | +0.1 | _ 0.7 | _ 1.2 | _ 1.3 | _ 1.6 | _ 1.9 | _ 2.0 | _ 2.6 | _ 2.8 | _ 2.9 | _ 3.2 | 20 |
| July | +0.5 | 0.0 | _ 0.5 | 0.8 | _ 0.9 | _ 1.2 | _ 1.3 | _ 1.4 | _ 1.6 | _ 1.7 | _ 1.9 | _ 1.8 | 21 |
| August | +0.7 | +0.3 | _ 0.1 | _ 0.3 | _ 0.5 | _ 0.7 | _ 1.0 | _ 1.3 | _ l.6 | _ 2.1 | _ 2.2 | _ 2.1 | 21 |
| September. | +1.3 | +0.4 | _ 0.2 | _ 0.6 | _ 0.9 | _ 1.3 | _ 1.7 | _ 2.2 | _ 2.5 | _ 2.9 | _ 2.9 | _ 2.8 | 20 |
| October | +3.0 | +2.0 | +1.1 | +0.3 | _ 0.5 | _ 1.3 | _ 2.0 | _ 2.8 | _ 3.7 | _ 4.4 | _ 4.7 | _ 4.8 | 20 |
| November | +4.3 | +3.3 | +2.0 | +0.8 | +0.1 | _ 0.7 | _ 1.4 | _ 2.5 | _ 3.9 | - 5.1 | — 6.1 | _ 6.5 | 18 |
| December | +5.3 | +4.3 | +2.9 | +1.8 | +0.8 | _ 0.2 | _ 1.8 | _ 3.2 | _ 4.9 | — 6.6 | _ 7.4 | _ 7.9 | 20 |
| June to Aug | +0.7 | +0.1 | _ 0.4 | 0.8 | _ 0.9 | _ 1.2 | _ 1.4 | _ 1.6 | _ 1.9 | _ 2.2 | _ 2.3 | _ 2.4 | |
| Year | +3.4 | +2.1 | +1.0 | +0.1 | _ 0.6 | _ 1.3 | _ 2.1 | _ 2.0 | _ 3.8 | _ 4.7 | _ 5.4 | _ 5.6 | |

The average daily range of temperature for the year is about double the range for the wet months from June to August. The range during the cold half-year is generally large compared with the range of the hot and the wet half. The daily range for Poona is for the year 12.1° and for the wet months June to August 5.7°.

A comparison of the range of the mean temperatures of the different months for the same series of years, shows that the variation is least 8.5° in July and August, September comes third with a range of 10.6°, June fourth with 12°, October fifth with 15.1°, November sixth with 18.4°, May seventh with 18.7°, December eighth with 19.3°, January ninth with 20.6°, April tenth with 20.7°, and February and March eleventh and twelfth with 21.2° each. The details are:

POONA CITY DAILY RANGE, 1856-1874.

| MONTH. | Mean Maximum. | Mean Minimum. | Range. | Annual Variation of Range. | | Mean Minimum. | Mean Minimum. | Range. | Annual Variation of Range. |
|----------|------------------|------------------|--------|-------------------------------------|-----------|------------------|------------------|--------|-------------------------------------|
| January | 81.8 | 61.2 | 20.6 | +4.4 | August | 79.1 | 70.6 | 8.5 | —7.7 |
| February | 85.7 | 64. 5 | 21.2 | +5.0 | September | 80.7 | 70.1 | 10.6 | -5.6 |
| March | 90.9 | 69.7 | 21.2 | +5.0 | October | 84.8 | 69.5 | 15.1 | -1.1 |
| April | 95.6 | 74.9 | 20.7 | +4.5 | November | 82.9 | 64.6 | 18.4 | +2.2 |
| May | 94.3 | 75.6 | 18.7 | +2.5 | December | 81.1 | 61.8 | 19.3 | +3.1 |
| June | 85.7 | 73.7 | 12.0 | -4.2 | December | 01.1 | 01.0 | 19.5 | , 3.1 |
| July | 80.3 | 71.8 | 8.5 | — 7.7 | Year | 85.2 | 69.9 | 16.2 | |

During the same period the highest recorded monthly mean temperature varied from 86.7 in September to 104.6 in May, and the lowest from 47.3 in December to 66.4 in June. The details are:

POONA CITY HIGHEST AND LOWEST MONTHLY TEMPERATURE, 1856-1874.

| MONTH. | Maximum. | Minimum. | Range. | MONTH. | Maximum. | Minimum. | Range. |
|----------|----------|----------|--------|-----------|----------|----------|--------|
| January | 88.7 | 49.4 | 39.3 | July | 92.4 | 65.8 | 26.6 |
| February | 96.3 | 53.0 | 43.3 | August | 87.6 | 64.2 | 23.4 |
| March | 100.6 | 55.0 | 45.6 | September | 86.7 | 62.1 | 24.6 |
| April | 105.5 | 60.0 | 43.5 | October | 92.3 | 57.4 | 34.9 |
| May | 104.6 | 66.0 | 38.6 | November | 92.6 | 48.2 | 43.8 |
| June | 99.5 | 66.4 | 33.1 | December | 87.6 | 47.3 | 40.3 |

For the five years ending 1881, the mean monthly thermometer readings at Poona show a mean maximum of 92 in May and June 1880 and a mean minimum of 61 in December 1878, January 1879, and December 1880; at Baramati a mean maximum of 100 in April 1881 and a mean minimum of 60 in November and December 1879 and in December 1881; at Talegaon-Dabhade a mean maximum of 99 in April 1879 and a mean minimum of 59 in December 1878; at Sasvad a mean maximum of 94 in March 1880 and in April 1879, 1880, and 1881, and a mean minimum of 50 in November 1879; at Indapur a

mean maximum of 110 in May 1877 and a mean minimum of 61 in January 1880 and in November 1879; at Jejuri a mean maximum of 99 in May 1877 and April 1880 and a mean minimum of 62 in November and December 1879 and in January 1880; and at Talegaon-Dhamdhere a mean maximum of 98 in May 1879 and a mean minimum of 52 in December 1881. The details are;

POONA DISTRICT THERMOMETER READINGS, 1877-1881.

| CTATION | Janu | ary. | Febru | uary. | Mar | ch. | Ар | ril. | Ma | ıy. | Jur | ne. |
|-----------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| STATION. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| Poona. | | | | | | | | | | | | |
| 1877 | 76 | 64 | 78 | 63 | 90 | 74 | 86 | 74 | 91 | 78 | 86 | 72 |
| 1878 | 77 | 68 | 83 | 68 | 90 | 75 | 89 | 78 | 91 | 76 | 91 | 73 |
| 1879 | 69 | 61 | 70 | 63 | 83 | 67 | 90 | 77 | 90 | 74 | 81 | 73 |
| 1880 | 69 | 59 | 69 | 67 | 90 | 62 | 91 | 78 | 92 | 74 | 92 | 74 |
| 1881 | 66 | 58 | 68 | 54 | 72 | 62 | 88 | 66 | 88 | 68 | | |
| Baramati. | | | | | | | | | | | | |
| 1877 | 84 | 61 | 86 | 62 | 93 | 72 | 96 | 78 | 97 | 80 | 92 | 79 |
| 1878 | | | | | | | | | | | | |
| 1879 | 82 | 64 | 83 | 68 | 95 | 74 | 96 | 82 | 98 | 80 | 88 | 78 |
| 1880 | 80 | 62 | 85 | 64 | 96 | 74 | 98 | 83 | 98 | 84 | 89 | 78 |
| 1881 | 81 | 61 | 85 | 64 | 91 | 71 | 100 | 80 | 99 | 82 | 94 | 77 |
| Talegaon- Dabhade. | | | | | | | | | | | | |
| 1877 | 75 | 61 | 86 | 65 | | | 92 | 80 | 98 | 78 | 90 | 73 |
| 1878 | 83 | 55 | 88 | 66 | 88 | 73 | 96 | 80 | 94 | 79 | 97 | 78 |
| 1879 | 83 | 59 | 84 | 65 | 97 | 65 | 99 | 78 | 98 | 76 | 97 | 74 |
| 1880 | 79 | 61 | 86 | 59 | 96 | 70 | 96 | 75 | 96 | 75 | 90 | 74 |
| 1881 | 84 | 61 | 90 | 62 | 98 | 68 | 98 | 72 | 98 | 79 | 96 | 75 |
| Sasvad. | | | | | | | | | | | | |
| 1877 | 80 | 70 | 82 | 64 | 32 | 68 | 88 | 72 | 90 | 80 | 86 | 76 |

| 1878 | | 82 | 56 | 82 | 64 | 92 | 70 | 92 | 74 | 90 | 74 | 86 | 70 |
|-------------------|-----|----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| 1879 | | 79 | 68 | 80 | 62 | 88 | 66 | 94 | 72 | 92 | 76 | 82 | 70 |
| 1880 | | 83 | 52 | 84 | 56 | 94 | 70 | 94 | 74 | 92 | 74 | 86 | 78 |
| 1881 | | 76 | 58 | 82 | 60 | 88 | 66 | 94 | 74 | 98 | 76 | 87 | 72 |
| Indapu | ır. | | | | | | | | | | | | |
| 1877 | | 93 | 64 | 98 | 65 | 101 | 71 | 104 | 74 | 110 | 78 | 104 | 79 |
| 1878 | | 94 | 64 | 100 | 68 | 106 | 72 | 107 | 78 | 106 | 80 | 106 | 81 |
| 1879 | | 81 | 67 | 84 | 70 | 94 | 73 | 97 | 81 | 99 | 80 | 89 | 77 |
| 1880 | | 79 | 61 | 89 | 64 | 95 | 76 | 97 | 83 | 97 | 81 | 94 | 76 |
| 1881 | | 76 | 64 | 86 | 67 | 91 | 72 | 99 | 81 | 98 | 83 | 93 | 76 |
| Jejuri | • | | | | | | | | | | | | |
| 1877 | | 83 | 67 | 87 | 66 | 91 | 76 | 95 | 80 | 99 | 80 | 94 | 78 |
| 1878 | | 82 | 65 | 90 | 72 | 98 | 75 | 98 | 82 | 97 | 80 | 94 | 76 |
| 1879 | | 84 | 64 | 86 | 76 | 95 | 73 | 97 | 80 | 98 | 75 | 84 | 75 |
| 1880 | | 83 | 62 | 87 | 69 | 98 | 73 | 99 | 80 | 95 | 78 | 91 | 73 |
| 1881 | | 79 | 67 | 89 | 67 | 90 | 74 | 97 | 79 | 99 | 81 | 92 | 72 |
| Talegad Dhamdh | | | | | | | | | | | | | |
| 1877 | | 78 | 53 | 88 | 62 | 90 | 63 | 91 | 73 | 94 | 80 | 90 | 79 |
| 1878 | | 80 | 57 | 86 | 65 | 97 | 63 | 97 | 75 | 97 | 82 | 96 | 82 |
| 1879 | | 82 | 56 | 87 | 62 | 92 | 66 | 97 | 78 | 98 | 77 | 87 | 76 |
| 1880 | | 79 | 56 | 84 | 56 | 95 | 72 | 93 | 82 | 92 | 80 | 91 | 75 |
| 1881 | | 81 | 51 | 87 | 59 | 89 | 60 | 92 | 73 | 95 | 81 | 87 | 73 |

| STATION. | Jul | ly. | Aug | ust. | Septe | Octo | ber. | Nover | nber. | Decer | nber. | |
|----------|-----|------|------|------|-------|------|------|-------|-------|-------|-------|------|
| | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| Poona. | | | | | | | | | | | | |
| 1877 | 82 | 74 | 81 | 72 | 86 | 72 | 83 | 72 | 82 | 69 | 76 | 69 |
| 1878 | 83 | 71 | 84 | 71 | 86 | 71 | 86 | 72 | 84 | 68 | 79 | 61 |
| 1879 | 77 | 71 | 76 | 68 | 78 | 70 | 80 | 68 | 76 | 64 | 68 | 56 |

| 1880 | 77 | 63 | 76 | 62 | 75 | 63 | 77 | 67 | 77 | 66 | 69 | 61 |
|-----------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 1881 | | | | | | | | | | | | |
| Baramati. | | | | | | | | | | | | |
| 1877 | 88 | 80 | 86 | 79 | 87 | 80 | 88 | 74 | 86 | 70 | 86 | 58 |
| 1878 | | | | | | | | | | | | |
| 1879 | 86 | 80 | 84 | 75 | 86 | 78 | 88 | 72 | 88 | 60 | 78 | 60 |
| 1880 | 87 | 78 | 84 | 80 | 84 | 78 | 89 | 76 | 86 | 68 | 81 | 63 |
| 1881 | 89 | 78 | 88 | 78 | 86 | 77 | 88 | 72 | 82 | 61 | 82 | 60 |
| Talegaon- Dabhade. | | | | | | | | | | | | |
| 1877 | 80 | 75 | 80 | 73 | 83 | 74 | 84 | 68 | 84 | 67 | 89 | 60 |
| 1878 | 86 | 73 | 82 | 74 | 82 | 75 | 88 | 70 | 88 | 68 | 84 | 59 |
| 1879 | 79 | 74 | 77 | 72 | 78 | 72 | 81 | 72 | 84 | 60 | 78 | 60 |
| 1880 | 82 | 72 | 81 | 72 | 82 | 74 | 86 | 70 | 84 | 69 | 82 | 63 |
| 1881 | 80 | 73 | 78 | 73 | 82 | 70 | 83 | 70 | 82 | 62 | 82 | 64 |

POONA DISTRICT THERMOMETER READINGS, 1877-1881-continued.

| Station | July. | | August. | | September. | | October. | | November. | | December. | |
|----------|-------|------|---------|------|------------|------|----------|------|-----------|-----|-----------|------|
| | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min | Max. | Min. |
| Sasvad. | | | | | | | | | | | | |
| 1877 | 84 | 74 | 86 | 76 | 79 | 74 | 82 | 67 | 82 | 62 | 84 | 60 |
| 1878 | 76 | 70 | 76 | 70 | 78 | 70 | 82 | 70 | 76 | 64 | 74 | 61 |
| 1879 | 78 | 74 | 74 | 63 | 78 | 68 | 82 | 62 | 84 | 50 | 72 | 52 |
| 1880 | 76 | 72 | 76 | 71 | 78 | 70 | 82 | 70 | 77 | 62 | 75 | 61 |
| 1881 | 78 | 72 | 76 | 70 | 80 | 70 | 82 | 68 | 80 | 56 | 74 | 60 |
| Indapur. | | | | | | | | | | | | |
| 1877 | 97 | 78 | 99 | 78 | 93 | 76 | 89 | 73 | 96 | 72 | 95 | 70 |
| 1878 | 91 | 76 | 84 | 76 | 87 | 76 | 85 | 70 | 83 | 69 | 72 | 63 |
| 1879 | 85 | 78 | 83 | 76 | 85 | 76 | 86 | 71 | 82 | 61 | 76 | 67 |

| 1880 | 84 | 78 | 85 | 77 | 85 | 75 | 86 | 75 | 82 | 71 | 77 | 66 |
|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 1881 | 87 | 74 | 86 | 78 | 85 | 75 | 84 | 73 | 83 | 64 | 78 | 64 |
| Jejuri. | | | | | | | | | | | | |
| 1877 | 86 | 76 | 81 | 75 | 85 | 74 | 82 | 72 | 84 | 72 | 83 | 66 |
| 1878 | 88 | 72 | 81 | 74 | 81 | 77 | 85 | 75 | 83 | 75 | 84 | 65 |
| 1879 | 82 | 74 | 81 | 73 | 84 | 73 | 85 | 73 | 84 | 62 | 79 | 62 |
| 1880 | 80 | 74 | 81 | 73 | 80 | 74 | 86 | 70 | 81 | 70 | 79 | 68 |
| 1881 | 85 | 74 | 79 | 73 | 79 | 73 | 86 | 73 | 80 | 67 | 79 | 67 |
| Talegaon- Dhamdhere. | | | | | | | | | | | | |
| 1877 | 91 | 79 | 90 | 77 | 86 | 77 | 82 | 75 | 81 | 68 | 81 | 61 |
| 1878 | 86 | 78 | 84 | 78 | 84 | 78 | 84 | 74 | 82 | 62 | 76 | 56 |
| 1879 | 92 | 77 | 79 | 74 | 80 | 74 | 82 | 68 | 81 | 56 | 75 | 55 |
| 1880 | 72 | 70 | 82 | 70 | 80 | 70 | 85 | 78 | 85 | 64 | 85 | 62 |
| 1881 | 82 | 76 | | | | | 80 | 69 | 82 | 58 | 83 | 52 |

Yaravda

Thermometer readings at Yaravda Jail near Poona show that in 1881 the yearly mean temperature was 72.7. May was the hottest month with an average temperature of 80.2; April was second with 78.5; June was third with 77.3; March, February, and October came close together with a fraction over 74°; then came September, August, and July, all with a fraction over 72° or very near the annual mean. Below the annual mean were November with 68.1, January with 66.6, and December with 66.2. The highest point registered was 101.5 in April and the lowest 53.4 in December. The daily range varied from 34.4 in March to 11 in July. The details are:

YARAVDA THERMOMETER READINGS, 1881.

| | Jan. | Feb. | Mar. | Apl. | May. | June. | July. | Aug. | Sep. | Oct. | Nov. | Dec. | Annual Means |
|--------------------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|-----------------|
| Extreme Maximum | 85.5 | 90.7 | 96.4 | 101.5 | 101.3 | 90.5 | 80.9 | 81.3 | 84.1 | 89.6 | 84.6 | 85.7 | 89.3 |

| Extreme Minimum | 55.1 | 57.2 | 62.1 | 69.2 | 71.3 | 72.4 | 69.9 | 69.8 | 68.6 | 65.7 | 58.1 | 53.4 | 84.4 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mean Daily Maxima | 83.9 | 88.1 | 93.3 | 96.8 | 96.5 | 85.5 | 76.9 | 76.9 | 78.7 | 85.8 | 81.9 | 84.1 | 85.7 |
| Mean Daily Minima | 49.3 | 51.5 | 55.3 | 60.2 | 63.9 | 68.2 | 67.8 | 68.8 | 66.5 | 63.2 | 54.4 | 48.3 | 59.7 |
| Mean Daily Range. | 30.4 | 33.4 | 34.4 | 32.3 | 30.0 | 18.1 | 10.9 | 11.5 | 15.5 | 23.8 | 26.5 | 32.3 | 24.9 |
| Average Means | 66.6 | 74.8 | 74.3 | 78.5 | 80.2 | 77.3 | 72.3 | 72.5 | 72.0 | 74.4 | 68.1 | 66.2 | 72.7 |

Barometric Pressure.

The mean barometric pressure for each year of complete observations is shown for the city of Poona in the following table, the means being derived from two daily observations made at 9-30 A.M. and 3-30 P.M:

POONA CITY BAROMETRIC PRESSURE, 1866-1874.

| YEAR. | Mean. | Excess. | YEAR. | Mean. | Excess. | YEAR. | Mean. | Excess. |
|-------|--------|---------|-------|--------|---------|-------|--------|---------|
| 1856 | 27.802 | +.036 | 1863 | 27.850 | .000 | 1870 | 27.837 | 019 |
| 1857 | 27.873 | +.017 | 1864 | 27.882 | +.020 | 1871 | 27.855 | 001 |
| 1858 | - | | 1865 | 27.874 | +.018 | 1872 | 27.834 | 022 |
| 1859 | 27.848 | 008 | 1866 | 27.857 | +.001 | 1873 | 27.844 | 012 |
| 1860 | 27.856 | .000 | 1867 | 27.846 | 010 | 1874 | 27.841 | 015 |
| 1861 | 27.847 | 009 | 1868 | 27.852 | 004 | | | |
| 1862 | 27.845 | 011 | 1869 | 27.842 | 014 | | | |

The observations during the same series of years (1856-1874) show that in the six months between October and April the barometric pressure is over the mean and in the six months between April and October the pressure is below the mean. The month of least pressure is June with 0.145 below the mean July is next with 0.142, August third with 0.096, May fourth with 0.003, September fifth with 0.043,

and April sixth with 0.013. Of the six months of excessive pressure October is lowest with 0.029, March next with 0.043, February third with 0.085, November fourth with 0.102, January fifth with 0.118, and December highest with 0.128. The details are:

POONA CITY MONTHLY BAROMETRIC VARIATIONS, 1856-1874.

| MONTH. | 9.30 A.M. and 3.30 P.M. | Corrected. | | 9.30 A.M. and 3.30 P.M. | Corrected. | MONTH. | 9.30 A.M. and 3.30 P.M. | Corrected. |
|----------|-------------------------------------|------------|--------|-------------------------------------|---------------|-----------|-------------------------------------|------------|
| January | +.120 | +.118 | May | - .065 | 063 | September | _ .044 | 043 |
| February | +.086 | +.085 | June | _ .146 | — .145 | October | +.029 | +.029 |
| March | +.039 | +.043 | July | - .141 | - .142 | November | +.104 | +.102 |
| April | _ .015 | 013 | August | - .092 | 090 | December | +.129 | +.128 |

In the following table is shown for Poona, for each month and for the whole year, the excesses of the mean barometric pressures at the several hours of the day above the mean barometric pressure for the twenty-four hours:

POONA BAROMETRIC PRESSURE IN LOCAL CIVIL HOURS, 1856-1874.

| MONTH. | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------|-------|-------|-------|-------|-------|-------|-------|-----|
| January | +.008 | +.027 | +.049 | +.068 | +.068 | +.039 | +.007 | 025 |
| February | +.009 | +.028 | +.048 | +.066 | +.067 | +.040 | +.011 | 017 |
| March | +.011 | +.033 | +.050 | +.064 | +.062 | +.034 | +.008 | 024 |
| April | +.018 | +.037 | +.054 | +.066 | +.060 | +.032 | +.004 | 024 |
| May | +.015 | +.030 | +.045 | +.065 | +.053 | +.028 | +.002 | 022 |
| June | 004 | +.012 | +.024 | +.036 | +.035 | +.016 | .000 | 014 |
| July | 006 | +.006 | +.021 | +.037 | +.036 | +.021 | +.005 | 012 |

| August | 003 | +.013 | +.025 | +.043 | +.044 | +.024 | +.008 | 008 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-----|
| September | +.005 | +.020 | +.035 | +.050 | +.045 | +.029 | +.007 | 016 |
| October | +.008 | +.026 | +.043 | +.058 | +.058 | +.031 | +.004 | 022 |
| November | +.008 | +.027 | +.047 | +.055 | +.063 | +.036 | +.006 | 021 |
| December | +.004 | +.024 | +.045 | +.062 | +.063 | +.036 | +.007 | 020 |
| Year | +.007 | +.024 | +.041 | +.056 | +.055 | +.031 | +.006 | 018 |
| June to August | 004 | +.019 | +.023 | +.039 | +.038 | +.020 | +.004 | 011 |

POONA BAROMETRIC PRESSURE LOCAL CIVIL HOURS, 1856-1874—continued.

| MONTH. | | | 14 | 15 | 16 | 17 | 18 | 8 | 19 |) | 20 | 21 |
|-------------|-----|----|------|---------------|---------------|--------------|-----------|-----|--------------|----------|-------|---------------|
| January | | _ | .051 | —. 071 | 070 | 04 | 90 | 27 | —.0 (| 06 | +.016 | + 036 |
| February | | _ | .048 | —. 070 | - .072 | — .05 | 5 —.0 |)34 | —. 0 | 11 | +.013 | +.036 |
| March | | _ | .053 | —. 075 | — 081 | —.05 | 90 | 35 | —.0 (| 09 | +.015 | +.037 |
| April | | _ | .050 | — .073 | 076 | — .05 | 2 —.0 |)31 | — .00 | 07 | +.015 | +.034 |
| May | | _ | .043 | 060 | — .067 | 045 | 0 |)27 | — .00 | 07 | +.017 | +.035 |
| June | | _ | .030 | — 043 | 043 | 029 | 0 | 13 | +.00 |)4 | +.020 | +.033 |
| July | | _ | .026 | — 040 | 039 | — .02 | 6 —.0 | 09 | +.00 |)5 | +.018 | +.031 |
| August | | _ | .026 | — 040 | 041 | 02 | 8 -0 | 11 | +.00 |)4 | + 019 | +.033 |
| September | | _ | .037 | - .056 | - .056 | —.03 | 8 —.0 |)20 | —.0 0 | 01 | + 016 | +.036 |
| October | | _ | .045 | — .063 | 064 | 04 | 5 — C |)24 | — 00 | 04 | +.017 | +.038 |
| November | | _ | .044 | 066 | 065 | 04 | 7 —.0 |)28 | — .00 | 06 | +.016 | +.038 |
| December | | _ | 043 | — 065 | 068 | - .04 | 9 —.0 |)28 | —.0 0 | 80 | +.008 | +.035 |
| Year | | _ | .041 | - .060 | 061 | 04 | 3 —.0 |)23 | —.0 0 | 03 | +.016 | +.036 |
| June to Aug | ust | _ | .027 | 041 | 041 | 02 | 8 —.0 |)11 | +.00 |)4 | +.019 | + 032 |
| MONTH. | 22 | 2 | 23 | 0 | 1 | 2 | 3 | 4 | | 5 | | plete ıys. |
| January | +.0 | 42 | + 02 | 26 +. 010 | .006 | _ .021 | _ .033 | .03 | - 37 .0 | _)11 | . 2 | 20 |

| | 1 | | | | | | | | |
|-----------------|-------|-------|-----------|-----------|-----------|-----------|-----------|-----------|----|
| February | +.042 | + 028 | +.015 | .000 | _ .019 | _ .033 | _ .031 | _ .013 | 20 |
| March | +.045 | +.033 | +.019 | + 001 | _ .016 | .030 | _ .029 | _ .005 | 21 |
| April | +.042 | +.029 | +.012 | _ 003 | _ .019 | _ .034 | _ .030 | _ .011 | 21 |
| May | +.040 | + 026 | +.012 | _ .002 | _ .016 | _ .030 | _ .026 | _ .006 | 21 |
| June | +.035 | +.025 | +.011 | .000 | _ .013 | _ .026 | _ .026 | _ .008 | 22 |
| July | +.031 | +.019 | +.009 | _ .003 | _ .015 | _ .027 | _ .025 | _ .012 | 21 |
| August | +.034 | +.020 | +.005 | _ .008 | _ .022 | _ .035 | _ .035 | _ .022 | 21 |
| September | +.038 | +.024 | +.012 | _ .002 | _ .015 | _ .029 | _ .027 | _ .013 | 20 |
| October | +.041 | +.028 | +.012 | _ .003 | _ .016 | _ .030 | _ .029 | _ .011 | 20 |
| November | +.040 | +.023 | .+ 008 | _ .008 | _ .022 | _ .035 | _ .030 | _ .014 | 18 |
| December | +.043 | +.028 | +.013 | _ 002 | _ .015 | _ .027 | _ .026 | _ .018 | 20 |
| Year | +.040 | +.026 | +.012 | _ 002 | _ .017 | _ .030 | _ .029 | .011 | |
| June to Aug. | +.033 | +.021 | +.008 | _ .004 | _ .017 | _ .029 | _ .029 | _ 014 | |

The following table shows for each month of the year the greatest and least values of barometric pressure observed at 9-30 A.M. or 3-30 P.M.:

POONA CITY MONTHLY BANGS OF BAROMETRIC PRESSURE, 1856-1874.

| MONTH. | Max. | Min. | Range. | MONTH | Max. | Min. | Range. |
|---------|--------|--------|--------|-------|--------|--------|--------|
| January | 28.263 | 27.769 | .494 | July | 27.916 | 27.491 | .424 |

| February | 28.229 | 27.756 | .473 | August | 27.957 | 27.578 | .879 |
|----------|--------|--------|------|-----------|--------|--------|------|
| March | 28.096 | 27.695 | .401 | September | 28.039 | 27.617 | .422 |
| April | 28.062 | 27.630 | .432 | October | 28.086 | 27.614 | .472 |
| May | 28.005 | 27.492 | .518 | November | 28.161 | 27.729 | .432 |
| June | 27.953 | 27.352 | .601 | December | 28.180 | 27.749 | .431 |

Vapour.

The values of the pressure of vapour have been calculated by Glaisher's Hygrometrical Tables from the observed temperatures of the dry and wet bulb thermometers. The annual variations give high values of the vapour pressure in the hot and wet months, that is from May to September, and low values in the cold months. The month of maximum vapour pressure is June. The mean daily variation for the year shows a minimum towards the end of the night hours and a maximum near the beginning of the night hours with a fairly regular progress during the intervals. The variation during the wet months has high values during the day and low values during the night. The daily range of the wet months is very small compared with the daily range of the cold months.

The following table shows for the nineteen years ending 1874 the mean pressure of vapour from observations taken at 9.30 A.M. and at 3-30 P.M.

POONA CITY PRESSURE OF VAPOUR 1856-1874

| Year | Mean | Excess. | Year | Mean | Excess | Year | Mean | Excess |
|------|------|---------|------|------|--------|------|------|--------|
| | In. | In. | | In. | In. | | In. | In. |
| 1856 | .574 | 067 | 1863 | .550 | 031 | 1870 | .591 | +.010 |
| 1857 | .552 | 029 | 1864 | .549 | 032 | 1871 | .615 | +.034 |
| 1858 | 1 | 1 | 1865 | .602 | +.021 | 1872 | .592 | +.010 |
| 1859 | .612 | +.031 | 1866 | .591 | +.010 | 1873 | .538 | +.007 |
| 1860 | .570 | 011 | 1867 | .600 | +.019 | 1874 | .591 | +0.079 |
| 1861 | .550 | 031 | 1868 | .584 | +.003 | | | |
| 1862 | .562 | 019 | 1869 | .617 | .030 | | | |

Cloudiness.

The cloudiness of the sky is estimated in tenths of the celestial hemisphere, the unit being one-tenth of the whole sky. The following table shows the average cloudiness of the sky in each month of the year, from observations taken at 9-30 A.M. and. 3-30 P.M. during the nineteen years ending 1874:

POONA CITY CLOUDINESS, 1856-1874.

| MONTH. | Tenths. | MONTH | Tenths. |
|-----------|---------|-------------------|---------|
| January | 2.3 | October | 4.6 |
| February | 1.3 | November | 2.8 |
| March | 2.4 | December | 2.1 |
| April | 2.9 | | |
| May | 4.0 | May to October | 6.3 |
| June | 7.9 | November to April | 2.3 |
| July | 8.8 | | |
| August | 8.6 | Year | 4.6 |
| September | 7.2 | | |

Cloudiness is great during the with mouths and small daring the cold months. There is a slight excess in January above the cloudiness of the preceding and following months.

Fogs.

Dews appear in the latter part of October and last till the *end* of February. Fogs are rare in the open east. They have been seen in the early mornings in October, November, December, January, and February, but disappear by half-past nine. In the western hills mists are common from May to', September. In May the cool night air condenses the watery vapour. Sometimes mists rise from the Konkan and fly east with great swiftness. At other times when the air is still the mist stretches over the Konkan like a sea of milk, the tops of the hills standing cut like islands. After the monsoon seta in early in June, except during occasional breaks, the western hills are shrouded in drenching mists and rain clouds.

Colonel Sykes has recorded the following observations on the vapour in the Deccan air. The yearly mean dew point was higher at 9.30 A.M. than at sunrise or at 4 P.M. From June to December 1826, both inclusive, the mean dew point was 66° 75', and the mean temperature 77° 23', a cubic foot of air containing 7.455 grains of water. The lowest dew point was 44° at sunrise on the 4th of December, a cubic foot of air containing 3.673 grains of water at a temperature of 56°. The moistest month was July, when the mean weight of water in a cubic foot of air was 8.775 grains. This was exceeded on the 13th of June 1827 when at 4 P.M. the highest due point was 76°, the temperature of the air 72°, and a cubic foot of air contained 10.049 grains of water. On the 4th of January 1827 the air was remarkably dry, the dew point at sunrise being obtained three degrees below the congelation of water that is at 29°, the temperature of the air was 62°, and a cubic foot of air contained 2.146 grains of water. It might be supposed that the hottest months in the year, March April and May, would also be the driest. This is not the case. Observations taken on consecutive days in March 1828 establish the following comparisons between Bombay Khandala, and Poona. At 4 P.M. in Bombay on the 10th of March cubic foot of air held 11.205 grains of water, while at Poona at the same hour on the 14th of March a cubic foot of air contained only 2.273 grains of water; on the 11th at Khandala, 1744 feet above the sea, at 9-30 A.M. the dew point was 40° equivalent to 3.004 grains of water in a cubic foot of air. The occasional extreme dryness of the air in December, January, February, and part of March causes much inconvenience. Furniture cracks, doors shrink so that locks will not catch, tables and book-covers warp and curl, the contents of the inkstand disappear, and guill-pens are useless unless kept constantly moist.

Winds.

The chief feature in regard to the direction of the Poona winds is the commonness of easterly and westerly winds and the rareness of winds from the north and south. The period of strongest wind is during April and in May till the easterly thunderstorms begin. The easterly winds are extremely dry and dangerous to sleep in. Hot winds are rare as far west as Poona; in the centre of the district they blow chiefly from the north-west and west in the months of March and April, and in the east of the district from the north-east and east.

The observations of direction of wind taken at Poona at 9-30 A.M. and 3-30 P.M. have been grouped together in months. Each group includes

for each month the observations of the nineteen years ending 1874. The following are the results:

POONA CITY MONTHLY TABLE OF WINDS, 1856-1874.

| DIDECTION | | | | | | 9-30 | A.M. | | | | | |
|------------|------|------|------|--------|------|-------|-------|------|-------|------|------|------|
| DIRECTION. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
| N. | 54 | 57 | 96 | 100 | 70 | 10 | 3 | 9 | 37 | 56 | 14 | 29 |
| N.N.E. | 8 | 7 | 8 | 4 | 5 | | | | 3 | 14 | 16 | 6 |
| N.E. | 25 | 38 | 29 | 31 | 18 | 4 | 2 | 2 | 7 | 46 | 61 | 29 |
| E.N.E. | 20 | 22 | 7 | 3 | 1 | 1 | | 1 | | 22 | 51 | 38 |
| E. | 91 | 40 | 80 | 17 | 3 | 2 | | | 3 | 70 | 168 | 136 |
| E.S.R. | 28 | 13 | 5 | 5 | 1 | 1 | | | 1 | 21 | 47 | 58 |
| S.E. | 84 | 31 | 26 | 22 | 2 | 7 | | 1 | 4 | 56 | 100 | 107 |
| S.S.E. | 28 | 9 | 7 | 8 | 4 | 2 | | | 1 | 16 | 15 | 20 |
| S. | 38 | 15 | 10 | 14 | 12 | 6 | 11 | 8 | 5 | 21 | 13 | 12 |
| S.S.W. | 13 | 4 | 4 | 2 | 4 | 10 | | 1 | 6 | 7 | 2 | 2 |
| S.W. | 30 | 39 | 30 | 32 | 36 | 116 | 112 | 96 | 74 | 26 | 9 | 17 |
| W.S.W. | 17 | 14 | 12 | 8 | 28 | 86 | 112 | 98 | 51 | 21 | 3 | |
| W. | 45 | 65 | 99 | 76 | 135 | 165 | 316 | 233 | 159 | 54 | 5 | 10 |
| W.N.W. | 4 | 25 | 35 | 49 | 53 | 24 | 27 | 27 | 55 | 23 | | 16 |
| N.W. | 31 | 77 | 104 | 109 | 138 | 43 | 85 | 42 | 93 | 60 | 4 | 16 |
| N.N.W. | 11 | 18 | 25 | 36 | 17 | 3 | 4 | 9 | 11 | 14 | 2 | |
| Sums | 527 | 474 | 527 | 510 | 527 | 480 | 522 | 527 | 510 | 527 | 510 | 496 |

POONA CITY MONTHLY TABLE OF WINDS, 1856-1874-continued.

| DIDECTION | | | | | | 3-30 | P.M. | | | | | |
|-----------|----|------|------|--------|------|-------|-------|------|------|------|------|-----|
| DIRECTION | | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sep. | Oct. | Nov. | Dec |
| N | 56 | 66 | 107 | 140 | 116 | 26 | 1 | 10 | 36 | 75 | 19 | 26 |

| | | | | | | | | | | | , | |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| N.N.E. | 11 | 13 | 11 | 10 | 3 | 4 | 1 | 1 | 6 | 9 | 16 | 3 |
| N.E. | 31 | 39 | 50 | 36 | 16 | 3 | 1 | 4 | 11 | 65 | 61 | 36 |
| EN.E. | 18 | 21 | 5 | 11 | 2 | 2 | | | 5 | 25 | 54 | 31 |
| Е | 88 | 33 | 21 | 15 | 9 | 1 | | | 2 | 72 | 171 | 141 |
| E.S.E | 27 | 16 | 5 | 3 | 1 | 1 | | | | 17 | 34 | 52 |
| S.E. | 93 | 41 | 25 | 25 | 4 | 10 | | 4 | | 61 | 100 | 109 |
| S.S.E. | 30 | 16 | 7 | 3 | | | | | 1 | 18 | 18 | 22 |
| S | 40 | 25 | 19 | 13 | 8 | 8 | 16 | 10 | 5 | 17 | 19 | 14 |
| S.S.W. | 14 | 5 | 4 | 3 | 2 | 7 | | | 3 | 7 | 3 | 2 |
| S.W. | 32 | 26 | 33 | 24 | 31 | 156 | 123 | 100 | 76 | 26 | 8 | 18 |
| W.S.W. | 21 | 15 | 20 | 17 | 19 | 60 | 93 | 94 | 44 | 14 | | 1 |
| W. | 32 | 60 | 84 | 53 | 96 | 116 | 204 | 193 | 149 | 34 | 4 | 10 |
| W.N.W. | 5 | 12 | 81 | 26 | 48 | 36 | 26 | 48 | 71 | 15 | 1 | 14 |
| N.W. | 26 | 72 | 82 | 92 | 130 | 46 | 56 | 55 | 94 | 49 | | 15 |
| N.N.W. | 8 | 21 | 23 | 39 | 44 | 15 | 1 | 6 | 7 | 23 | 2 | 1 |
| Sums | 527 | 481 | 527 | 510 | 527 | 480 | 522 | 527 | 510 | 527 | 510 | 495 |

The coefficients and angles of formula representing the daily variation in the duration of different winds are:

POONA CITY DURATION OF WINDS, 1856-1874.

| HOURS | | November to January. | | | | | | | February to April,. | | | | | | |
|-------|------|----------------------|----|-----|-----|----|-----|-----|---------------------|-----|-----|----|--|--|--|
| | c1 | a1 | | c2 | a2 | | c1 | a1 | | c2 | a2 | | | | |
| | | 0 | , | | 0 | , | | 0 | , | | 0 | , | | | |
| 6 | .98 | 102 | 20 | .70 | 184 | 54 | .77 | 303 | 17 | .47 | 302 | 0 | | | |
| 7 | .98 | 90 | 56 | .67 | 178 | 17 | .78 | 310 | 50 | 46 | 307 | 7 | | | |
| 8 | 1.03 | 101 | 12 | .72 | 188 | 48 | .77 | 311 | 20 | .40 | 290 | 14 | | | |
| 9 | 1.08 | 97 | 59 | .72 | 184 | 46 | .66 | 322 | 26 | .47 | 277 | 16 | | | |
| 10 | 1.09 | 103 | 16 | .84 | 193 | 42 | .81 | 342 | 41 | .51 | 277 | 49 | | | |

| 11 | 1.12 | 105 | 2 | .78 | 202 | 37 | .85 | 344 | 59 | .35 | 274 | 54 |
|-------------------|------|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|
| 12 | 1.15 | 110 | 19 | .74 | 214 | 33 | .80 | 357 | 8 | .18 | 276 | 20 |
| 13 | 1.11 | 106 | 48 | .78 | 213 | 29 | .71 | 1 | 37 | .25 | 274 | 34 |
| 14 | 1.16 | 111 | 43 | .75 | 218 | 32 | .59 | 4 | 51 | .33 | 328 | 44 |
| 15 | 1.12 | 113 | 8 | .66 | 229 | 18 | .52 | 357 | 48 | .29 | 319 | 11 |
| 16 | 1.06 | 108 | 47 | .66 | 210 | 4 | .58 | 4 | 56 | .35 | 348 | 22 |
| 17 | .92 | 114 | 54 | .67 | 200 | 51 | .56 | 353 | 53 | .33 | 313 | 47 |
| 18 | .94 | 115 | 12 | .65 | 197 | 53 | .65 | 347 | 28 | .19 | 325 | 29 |
| 19 | .91 | 114 | 2 | .68 | 209 | 13 | .64 | 340 | 43 | .25 | 338 | 38 |
| 20 | .92 | 108 | 26 | .64 | 208 | 11 | .66 | 328 | 44 | .17 | 239 | 2 |
| 21 | .91 | 107 | 3 | .65 | 205 | 23 | .62 | 328 | 53 | .24 | 209 | 45 |
| 22 | .87 | 107 | 6 | .75 | 203 | 30 | .60 | 326 | 35 | .28 | 247 | 4 |
| 23 | .91 | 108 | 1 | .73 | 195 | 11 | .54 | 327 | 12 | .30 | 235 | 47 |
| 0 | .95 | 105 | 2 | .66 | 192 | 20 | .49 | 310 | 51 | .34 | 233 | 28 |
| 1 | .90 | 106 | 13 | .63 | 191 | 51 | .56 | 211 | 23 | .33 | 226 | 13 |
| 2 | .87 | 111 | 33 | .66 | 202 | 17 | .52 | 309 | 31 | .35 | 222 | 43 |
| 3 | .94 | 111 | 55 | .69 | 202 | 7 | .48 | 318 | 22 | .35 | 222 | 43 |
| 4 | .92 | 109 | 37 | .75 | 201 | 48 | .45 | 326 | 40 | .30 | 216 | 52 |
| 5 | .91 | 112 | 37 | .69 | 203 | 58 | .51 | 325 | 23 | .25 | 226 | 38 |
| Means | .99 | 107 | 42 | .69 | 201 | 20 | .59 | 333 | 52 | .25 | 274 | 34 |
| Complete Days. | | | | | | | 59 | | | | | |

continued..

| HOURS | | Jun | e to S | eptembe | er. | Year. | | | | | | |
|-------|------|-----|--------|---------|-----|-------|-------|-----|----|-----|-----|----|
| | c1 | a1 | | c2 | a2 | | c1 a1 | | c2 | a2 | | |
| | | 0 | , | | 0 | , | | 0 | , | | 0 | , |
| 6 | 1.64 | 260 | 83 | 1.23 | 160 | 6 | .58 | 270 | 59 | .63 | 186 | 26 |
| 7 | 1.65 | 259 | 31 | 1.26 | 157 | 31 | .56 | 278 | 4 | .62 | 180 | 0 |
| 8 | 1.68 | 260 | 29 | 1.25 | 156 | 55 | .55 | 272 | 5 | .65 | 184 | 24 |

| 9 | 1.67 | 261 | 23 | 1.25 | 159 | 49 | .50 | 274 | 34 | .65 | 188 | 0 | |
|-------------------|------|-----|----|------|-----|----|-----|-----|----|-----|-----|----|--|
| 10 | 1.64 | 264 | 3 | 1.28 | 159 | 52 | .41 | 287 | 6 | .67 | 193 | 51 | |
| 11 | 1.59 | 263 | 9 | 1.02 | 159 | 58 | .39 | 284 | 45 | .60 | 195 | 25 | |
| 12 | 1.62 | 267 | 53 | 1.01 | 166 | 14 | .34 | 292 | 45 | .54 | 196 | 5 | |
| 13 | 1.56 | 268 | 32 | 1.03 | 160 | 41 | 34 | 295 | 49 | .52 | 193 | 14 | |
| 14 | 1.57 | 269 | 38 | .89 | 165 | 2 | .32 | 288 | 26 | 43 | 198 | 51 | |
| 15 | 1.54 | 265 | 33 | .85 | 157 | 4 | .32 | 278 | 53 | .37 | 203 | 48 | |
| 16 | 1.61 | 266 | 59 | .95 | 157 | 23 | .37 | 287 | 27 | .37 | 189 | 13 | |
| 17 | 1.68 | 271 | 22 | 1.06 | 175 | 41 | .44 | 283 | 6 | .46 | 195 | 15 | |
| 18 | 1.70 | 271 | 1 | 1.02 | 175 | 31 | .47 | 283 | 27 | .45 | 189 | 2 | |
| 19 | 1.92 | 270 | 0 | 1.08 | 176 | 49 | .50 | 283 | 46 | .48 | 195 | 47 | |
| 20 | 1.72 | 267 | 0 | 1.13 | 171 | 52 | .56 | 279 | 18 | .60 | 194 | 30 | |
| 21 | 1.72 | 267 | 0 | 1.13 | 171 | 52 | .56 | 278 | 17 | .66 | 193 | 11 | |
| 22 | 1.67 | 266 | 34 | 1.06 | 173 | 29 | .58 | 276 | 28 | .64 | 196 | 26 | |
| 23 | 1.66 | 266 | 54 | 1.06 | 171 | 20 | .53 | 274 | 19 | .64 | 190 | 47 | |
| 0 | 1.67 | 264 | 30 | 1.04 | 166 | 38 | .54 | 271 | 4 | .61 | 138 | 32 | |
| 1 | 1.68 | 266 | 56 | 1.10 | 167 | 59 | .56 | 274 | 5 | .63 | 186 | 20 | |
| 2 | 1.69 | 264 | 13 | 1.15 | 162 | 21 | .58 | 268 | 2 | .67 | 185 | 58 | |
| 3 | 1.67 | 264 | 30 | 1.11 | 164 | 50 | .54 | 267 | 53 | .68 | 187 | 39 | |
| 4 | 1.70 | 264 | 56 | 1.17 | 165 | 8 | .53 | 268 | 55 | .69 | 184 | 58 | |
| 5 | 1.68 | 263 | 51 | 1.13 | 164 | 7 | .54 | 267 | 53 | .63 | 184 | 32 | |
| Means | 1.65 | 265 | 50 | 1.08 | 165 | 35 | .47 | 277 | 17 | .58 | 189 | 57 | |
| Complete Days. | 82 | | | | | | | 238 | | | | | |

MINERALS.

[This chapter owes much to additions and revision by Mr. J. G. Moore, C. S., Collector of Poona.]

EXCEPT iron, [The mineral section is contributed by Major A. R. Seton, R. E., Executive Engineer.] which occurs in various places as haematite associated with laterite or iron-clay, the district produces no metallic ores. Grains of magnetic iron derived from the traps are frequently found in the beds of streams.

Stone.

The trap rock almost everywhere yields good building stone and roadmetal. Specially good quarries are worked at Bhamburda, about a mile to the north-west of Poona; on the north-side of Yaravda hill, about three miles north-east of Poona; at Lonikand on the Ahmadnagar road, about fifteen miles beyond Yaravda; at Hadapsar five miles east of Poona; at Lonikalbhar, Uruli, Yevat, and Patas, between ten and thirty miles east of Poona on the Sholapur branch of the Peninsula railway; at Katraj, Kamthuri, Kapurhol, and Kikvi, within twelve miles south of Poona on the new Satara road near Purandhar hill; and at Sasvad, nineteen miles south of Poona. There are also good stone-quarries along the Bombay mail road, near the villages of Pimpri, Shelarvadi, Kala, Lonavla, and Khandala and in the neighbourhood of Poona. The best guarry in the district is on the southern outskirts of the city of Poona. The stone of this guarry has been used in building Government House at Ganesh-khind and other large modern buildings in Poona. Where there are no good quarries trap boulders are used. The people of the district prefer trap boulders to any quarried stone and the wisdom of their choice is admitted by European, builders as is shown by the boulderless hill-sides near the great dam of Khadakvasla or Fife Lake.

Basalt.

A variety of compact dark blue basalt, which is common in many places all through the trap districts, is susceptible of high polish and is worked into idols, pedestals for wooden pillars, and inscription-slabs. [Dr. T. Cooke, Principal, Science College, Poona.] It is obtained from quarries worked at Muhammadvadi five miles south-east of Poona and at Uruli eighteen miles east of Poona on the Sholapur branch of the Peninsula railway.

Quartz.

Quartz occurs throughout the trap in various forms either crystalline or amorphous. The most common form assumed by the crystalline quartz is the trihedral. Crystalline quartz of various colours is recorded from

the hill-fort of Harishchandragad and amethystine quartz is occasionally found in the interior of nodules. Amorphous quartz occurs in the form of agate, jasper, and heliotrope. Agates are generally found in large and small nodules and some finely banded agates are sent to Cambay to be coloured by firing. The jasper and heliotrope bloodstone occurs chiefly in flat plates which appear to hare been formed in the cracks of crevices in the trap. Specimens of heliotrope and coloured quartz are common in the bed of the Mula-Mutha. [Madras Journal of Science and Literature, VI. 363. The *Gar-Pir* or Quartz-Saint whose tomb in about 200 yards to the south-east of the Collector's office in Poona, take its name from the large crystals which are heaped over the grave.]

Stilbite.

Stilbite, though less common than qartz, is by no means rare. One magnificent variety consists of large orange or salmon coloured crystals two or three inches long. Three miles south-west of Chas at Brahmanvadi great masses of radiating foliate stilbite occur imbedded in hard amygdaloid.

Apophylite.

The apophylite, which is commonly associated with stilbite, is the finest of all Deccan trap minerals. It generally occurs in four-sided prisms with terminal planes. The colour is white and more rarely pink or green. Some of the crystals are perfectly transparent.

Road Metal.

Road-metal is generally prepared from quarried stone. At the road-side it costs about 75. (Rs. 3½) the hundred cubic feet. Partially decomposed trap is known through the district, as *murum*.

Natural Salts.

Common salt is found in the bed of a rivulet at Kund Mavli near the falls on the Kukdi river, between Sirur and Kavtha. A little common salt with a trace of carbonate of soda encrusts the rocky bed for a few feet near the water line.

Carbonate of Soda.

Carbonate of soda occurs in a few places occasionally forming an efflorescence on the surface. Washermen use earth impregnated with this salt for washing clothes. Soda is also found mixed with earth near Sirur where it is dug out and sold for washing.

Colonel Sykes' attention was directed to the presence of carbonate of soda at Sirur by observing washermen digging for earth in the banks of the rivulet. Finding that they used it to wash their clothes, he obtained a quantity, lixiviated the earth, boiled down the lixivium, and when it cooled obtained a large crop of crystals which the usual tests showed to be carbonate of soda. At Lonikalbhar twelve miles east of Poona and two miles south of the Mula-Mutha river, within an area of 200 yards, a constant moisture and partial absence of vegetation is observed. An efflorescent matter appears on the surface every morning which is carefully swept up and sold to washermen.

[Geological Papers on Western India, 107.]

Good sand for mortar is found in the beds of almost all rivers and streams.

Limestone.

Limestone yielding useful lime occurs in several places, There are good quarries near the villages of Phursangi and Vadki at the foot of the Diva pass, about ten miles south-east of Poona; also near Uruli, Yevat, Kedgaon, and Dhond in the Bhimthadi sub-division. The lime produced from the stone of these quarries is of excellent quality. Except at the above places the time in general use is made of the lime-gravel or kankar which occurs on and below the surface over almost the whole district The nodules when carefully burnt make excellent cement.

Bricks and Tiles

Near many of the district streams earth is found suitable for making bricks and tiles. Burnt country bricks cost about 7s. (Rs. $3\frac{1}{2}$) the thousand, and English pattern bricks of a larger size 12s. (Rs. 6). Tiles cost from 8s. to 10s. (Rs. 4-5) the thousand, and the flat in general use 7s. (Rs. $3\frac{1}{2}$).

FORESTS

The area under forests in Poona is smaller than in most parts of the Presidency. Arrangements are still in progress for adding to the forest land which at present (October 1883) is estimated at about 660 square

miles of 12.14 per cent of the district. Of the area classed as forest land only a small fraction at present yields timber.

History.

For many years after the beginning of British rule, the comparatively small population and the limited area under tillage made any special measures for preserving forests unnecessary. In the rainy west, as late as 1836, the two pressing evils were malarious fevers and the ravages of wild beasts [In 1855 General Davison shot bears and panthers within a few miles of Poona, In 1840 the boldness of the wild beasts made the road from Poona to Junnar dangerous to travel by night. The Peshwa hunted panthers on the hills thirty miles east of Poona. Mr. W. H. A. Wallinger, Deputy Conservator of Forests, Poona, I. How to clear for tillage the large area under trees and brushwood was one of the most pressing administrative questions of the time. It was mainly with this object that when (1836-37) the revenue survey was introduced into the west of the district, almost all hill-sides were divided into plots and offered at little more than nominal rents. About twenty years later, when population had greatly increased and after the railway was opened through the Bor pass the great demand for wood and the ease with which it could be sent to market were rapidly stripping the country of trees. To check this evil certain lands were set apart by Government as forest reserves. IN 1849 a beginning of demarcation was made by Dr. Gibson, the father of Bombay forestry. He chose plots of tree-covered land which the people still call *Daktari Ran or* the Doctor's Forest. In 1854 at the survey settlement of the western sub-divisions soma lands were set apart for forest conservancy or ran rakshan.

In 1887 further measures were taken to add to the area of Government forests. In each sub-division the assistant collector examined all waste and unarable lands and marked off such plots as seemed likely to prove useful reserves. The work of demarcation was steadily tarried on, and by 1876 the whole of the district had been examined and tracts set aside as forest reserves.

The failure of rain in 1876 and 1877 drew special attention to the want of trees in Poona and other parts of the Deccan. At the same time the throwing up of arable land in Bhimthadi and Indapur, which accompanied and followed the famine, gave a special opportunity for adding to the forest area. To increase the area as much as possible it was determined to notify waste lands as forest, under Chapter X. of the Forest Act (X. of 1878). With this object lists of all available lands

were prepared and gazetted as forest land, a measure which raised the area of forest land from about 242,000 to about 400,000 acres. [Mr. G. W. Vidal, C. S.] As these additions of waste lands to forest area were made without selection, both in the interests of the people and of the forest department, a thorough redistribution has since become necessary. A large area of arable waste scattered over the plains, which was abandoned during or since the famine, had been needlessly included in the forest reserves. On the other hand the extent of hill or mountain land, which former demarcations had included under forest, was insufficient for protective purposes, especially in the west near the sources and head-waters of the leading rivers. To decide which of the existing forest lands should be kept and what additional waste and occupied lands should be added required a fresh and comprehensive demarcation of the entire tract. Early in 1881 an officer was appointed to carry out this duty. [In 1867, Mr. C. w. Bell, First Assistant Collector, began the work in the Mulshi petty division. His labours extended over the Haveli, Maval, Junnar, and Sirur sub-divisions. The Indapur and Bhimthadi forest lands were demarcated in 1875 by Mr. C. G. W. Macpherson, Assistant Collector, and Mr. W. H. A. Wallinger, Deputy Conservator. Purandhar was demarcated by the same officers in 1877, and the demarcation of the important forest sub-division of Khed occupied Mr. Johns, Assistant Collector, and Mr. Wallinger during the hot weathers of 1875 and 1876. In 1879, Mr. J. McL. Campbell, Forest Settlement Officer, submitted his report regarding the settlement of all the district forests. His successors, Mr. G. W. Vidal demarcated the forest lands of Bhimthadi, Maval, and part of Haveli; and Mr. A. B. Steward those of Indapur and Mulshi Petha in Haveli in 1880 and 1881. Mr. Vidal, a second time appointed Forest Settlement Officer, has since demarcated the forest lands of Baramati in Bhimthadi, Sirur, part of Khed including some, villages of the Ambegaon Peta, Junnar, and Purandhar. Parts of Haveli, Khed, and Ambegaon have still to be demarcated. He was entrusted with large discretion in acquiring occupied lands either by purchase or by exchange. Since 1881 final forest boundaries have been fixed in Bhimthadi, Indapur, Sirur, and Mayal and in the portions of Khed and Hayeli which fall within the charges of the mamlatdar of Khed and the mahalkari of Mulshi. In the sub-divisions of Junnar and Purandhar and in the petty divisions of Ambegaon in Khed and of Mulshi in Haveli the work is still in progress.

Demarcation.

The net results of the new demarcation are:

POONA FOREST DEMARCATION DETAILS, 1881-82.

| SUB-DIVISION. | TOTAL AREA ALIENAT- | AREA OF EXISTING RESERVES | INCLUI | ITIONAL A DED IN TH MARCATIO | TOTAL AREA OF PROPOSED | PER CENT OF | |
|---------------------------|---------------------------|---------------------------------|--------|------------------------------------|------------------------------|---------------------|----------------------|
| | ED VIII AGES | TO BE FINALLY RETAINED. | Waste. | Occupied. | Total. | FOREST RESERVES. | TO TOTAL AREA. |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | |
| Maval | 212,188 | 51,230 | 608 | 25,172 | 25,840 | 77,070 | 36 |
| Sirur | 303,210 | 11,914 | 22,12 | 11,112 | 13,324 | 25,239 | 8 |
| Indapur | 345,571 | 20,456 | 25,575 | 21,801 | 47,376 | 67,132 | 19 |
| Bhimthadi: | | | | | | | |
| (1)Mamlatdar's Charge. | 351,236 | 31,930 | 11,073 | 17,244 | 28,317 | 60,247 | 17 |
| (2)Mahalkari's Charge. | 245,650 | 10,656 | 1437 | 9465 | 10,902 | 21,558 | 8 |
| Khed: | | | | | | | |
| Malatdar's Charge | 295,436 | 54,804 | 1267 | 19,292 | 20,559 | 75,363 | 25 |
| Haveli | | | | | | | |
| Mahalkari's Charge | 118,367 | 24,895 | 214 | 27,505 | 27,719 | 52,614 | 44 |

In the east the greater part of the occupied land marked for forest has been secured by purchase or by exchange. In the west or Sahyadri sub-divisions, where the area of waste land available for exchange is more limited, progress must necessarily be slower. Many years must elapse before the whole area of mountain land included in this demarcation fan be brought under forest rules.

Establishment.

In 1863, the forests of Poona, Satara, and Ahmadnagar were the joint charge of one European officer whose office and executive establishment for Poona consisted of two clerks, six inspectors, thirtyfive foresters, and four messengers, representing a total monthly cost of £57 (Rs. 570). In 1870 Poona was formed into a separate forest charge and the establishment considerably increased.

In 1881-82 the district forest establishment included the settlement officer; the deputy conservator of forests; twelve range executives, five of them rangers on £5 to £10 (Rs. 50-100) a month and seven foresters on £2 to £4 (Rs. 20-40); thirty-six round-guards, six on £1 10s. (Rs. 15), fifteen on £1 4s. (Rs. 12), fifteen on £1 (Rs. 10); and 194 beat-guards, twenty of them on 18s. (Rs. 9), twenty-eight on 16s. (Rs.8), and 146 on 14s. (Rs. 7). Besides these establishment charges, £110 (Rs. 1100) were in 1881-82 paid as shares to rakhvaldars who are bound under written agreements to protect the forests of certain villages.

Description.

[Contributed by Mr. J. Mel. Campbell, C. s.] The Poona forest lands may be roughly grouped into three classes, hill, river bank, and upland reserves. Except in the Sinhaad range the hill reserves are chiefly found in the west. They are of two kinds, mixed evergreen woods and teak coppice. The mixed evergreen woods are found chiefly on the sides and plateaus of the main Sahyadri range, on the minor lines and offshoots which run parallel to the main range, and on the western ends of the spurs that stretch east at right angles to the main range. In these woods the chief trees are, the mango amba Mangifera indica, the ain Terminalia tomentosa, the nana and the bondara Lagerstraemia lanceolata and parvifolia, which are so closely alike that they are generally grouped as nana-bondara, the hedu Nauclea cordifolia, the kalamb Nauclea parvifolia, the asan Bridelia retusa, the sair Bombax malabaricum, the dhavda Conocarpus latifolia, the teak sag Tectona grandis, the jimbhul Eugenia jambolana, the yela Terminalia bellerica, the dhaman Grewia tiliaefolia, the myrobalan harda Terminalia chebula, and the bamboo. These evergreen woods yield little timber. The second kind of hill forests are the teak coppices. They are found chiefly on the slopes and terraces of the spurs that run east from the main range of the Sahyadris. The teak does not occur throughout the whole length of these eastern hills; it is found chiefly in a belt which begins about ten and continues to about twenty-five miles from the main range of the Sahyadris. In the important Sinhgad and Purandhar ranges in the south of the district, the teak passes further east than in the smaller spurs in the centre and north, valuable teak rafters being cut on the slopes of Sinhgad and as far east as Purandhar about forty-five miles from the line of the Sahyadris.

The second class of forest reserves are the river-side groves. These are found along the banks of almost all the larger rivers wherever there is land suited to the growth of trees. In almost all of these reserves the soil is a deep alluvial deposit, and most of the plantations are of well grown trees, chiefly *babhuls* Acacia arabica.

The third class of forest reserves, the upland or *mal* reserves are found in every sub-division, but chiefly in the Sirur, Bhimthadi, and Indapur sub-divisions. These uplands at present yield only grass, but they are being gradually covered with a growth of brushwood and saplings.

The different reserves may be most conveniently arranged in the following order: Junnar, Khed, Maval, Haveli, Sirur, Purandhar, Bhimthadi, and Indapur.

Junnar.

The Junnar forest reserves extend over about 112 square miles. Beginning from the north, the hill reserves are Chilhevadi with 491 acres and Ambegavan with 1442 acres, on the slopes of a range which runs east from Harishchandragad. These reserves contain valuable teak. Khireshvar with 4228 acres is in the north-west on the southern slope of Harishchandragad. It forms with Khubi the head of the valley of Madhkhore, and from its lands the Malsej pass leads into the Konkan. It is a mixed evergreen forest. The trees are of many varieties, but none are particularly large or of much market value. To the east of Khireshvar are the reserves of Kolvadi 1593 acres, Sangnore 1964 acres, and Pimpalgaon-Joga 1268 acres, and to the south are Khubi 355 acres, Karanjale 182 acres, and Pargaon 273 acres. These lead to the next important group of Sahyadri reserves, Taleran 1510 acres, and Nimgir 1072 acres, between the Malsej and Nana passes. Following the line of the Sahvadris and crossing the Kukdi valley, at the top of which there are the evergreen reserves of Ghatghar 1405 acres and Phangulgavan 785 acres, there is an important forest group at the head of the Mina valley comprising the reserves of Dhak 2103 acres and Amboli 694 acres. Of river-bank babhul groves, which do not include more than 500 acres, the chief are along the Kukdi and the Mina. At Hivre-Budrukh, seven or eight miles east of Junnar, is the botanical garden of eighteen acres which was started by Dr. Gibson, the first Conservator. It is now treated as an ordinary forest reserve. The upland or *mal* reserves, which include about 3400 acres of inferior soil, yield nothing but spear-grass. This is now being covered with nutritious pasture and saplings. The chief steps taken to grow nutritious grass on tracts which formerly yielded

nothing but spear-grass are the broadcast sowing of seeds of the hardier trees and brushwood with the object of giving shade and of increasing moisture, and the shutting of the land against grazing during the rainy season and thus allowing new grasses to seed.

Khed.

Khed, with about 164 square miles of reserves, is the chief forest tract in Poona. Except the alienated village of Virham the whole crest of the Sahyadris is one stretch of reserved forest comprising the reserves of Don 512 acres, Pimpargane 1009 acres, Ahupe 4754 acres, Kondhavale 6493 acres, Terungan 641 acres, Nigdale 2578 acres, Bhivegaon 1392 acres, Bhovargiri 2604 acres, Velhavli 2990 acres, Bhomale 1188 acres, Kharpud 2735 acres, Vandre 1799 acres, and Torne-Khurd 859 acres. Except occasionally in sacred groves which have been untouched for generations, the trees in these forests, though green and fresh, are of moderate size. Harda Terminalia chebula, which produces the valuable myrobalan of commerce, is abundant throughout the Khed forests, and there is an extensive and valuable growth of bamboo in the Velhavli and Bhomale reserves. Besides the reserves along the edge of the Sahyadris Khed possesses large and most valuable teak coppice in a belt which begins ten miles east of the Sahyadris and stretches about fifteen miles further inland. The most important teak forests are in the Ghod valley, Gangapur 1440 acres, Giravli 921 acres, Amondi 1193 acres, Ghode 2442 acres, and Sal 44 acres. Besides these, there are Dhakale 909 acres on a tableland between the Ghod and Bhima valleys, and Chas 2100 acres and Kaman 782 acres adjoining each other in the Bhima valley. The hill reserves to the east of this belt of teak are bare or have only a sprinkling of thorn-bushes. They are being sown broadcast with seeds of the following trees: bor Zizyphus jujuba, hingan Balanites egyptiaca, sarphali Boswellia thurifera, khair Acacia catechu, hivar Acacia leucophloea, kinai Albizia procera, maruk Ailanthus excelsa, sitaphal Anona squamosa, bel AEgle marmelos, tamarind, apta Bauhinia racemosa, shami Prosopis spicegera, and avla Phylanthus emblica. The river-side babhul groves, which include about 3000 acres along the Bhima and its tributaries, are fairly stocked with trees. The upland or mal reserves, which have an area of about 4000 acres, are bare and dry. They are being sown with the seed of such hardy plants as tarvad Cassia auriculata and shami Prosopis spicegera.

Maval.

The Maval forest reserves extend over about eighty-one square miles. Except a few small babhul groves along the Pauna, and some waste lands near the railway between Lonavla and Talegaon, the Maval reserves are all hill reserves on the main line of the Sahvadris and on the chain of hills which stretches east from Sakhupathar near Lonavla. The Maval forests are like the Junnar forests and are less extensive and vigorous than those of Khed. The best are Malegaon-Khurd with 569 acres, Malegaon-Budrukh with 2943 acres, Pimpri with 530 acres, Kune-Khurd with 405 acres, and Kune-Budrukh with 678 acres. These are on the main range of the Sahyadris a continuation of the Khed forests. South of the alienated village of Savle, which breaks the line of the Sahyadri reserves, come Khand with 551 acres, Kusur with 2328 acres, Jamboli with 1542 acres, Thoran with 2017 acres, Valvande with 1788 acres, Undhevadi with 1887 acres, Kere with 1181 acres, and Khandala with 1215 acres. South of Khandala comes Kurvande with 3077 acres, which, beginning with the slopes of the well. known Duke's Nose or Cobra's Hood, stretches south along the face of the Sahyadris, and with portions of Bhushi 316 acres, Kusgaon-Budrukh 557 acres, Gevdhe 1543 acres, and Atvan 774 acres, forms the plateau of Sakhupathar. The chief trees are the same as those mentioned as forming the mixed evergreen woods of the Sahyadris. A growth of bamboo is also springing up on the Sakhupathar plateau. The forest lands on the other eastern spurs are exceedingly bare, as the prices which firewood and charcoal fetch along the railway line have tempted the holders of hill-land to strip them of timber.

Haveli.

The Haveli forest lands occupy about 100 square miles. The Mulshi hills have been brought more under tillage than any other part of the Poona Sahyadris. The only forest reserves are Tamheni-Budrukh with 5042 acres, Saltar with 1053 acres, Yekole with 996 acres, Pimpri with 2534 acres, Nive with 1789 acres, and Ambavne with 1057 acres. The hills round Sinhgad yield teak, the best areas being Sinhgad with 4519 acres, and Donje with 1011 acres. The trees are most healthy and the nearness of the Sinhgad reserve to the Poona market greatly adds to its value. In the Katraj reserve of 1900 acres, fifteen years of careful protection have clothed the hill-sides with a young growth of many varieties of timber. But the other hill reserves which are mostly east of Sinhgad towards Dhavleshvar are either bare or have only a sprinkling of thorn bushes. The chief river-side reserves are along the Mula-Mutha from Manjri six miles, to Koregaon-Mul sixteen miles east of Poona.

Sirur.

Sirur has little forest land. There are no hill reserves, and the whole forest area does not cover more than twenty-five square miles. Before 1879, the Sirur forest area amounted to 3470 acres out of a total area of 303,210 acres. Additions in 1879 raised the forest area to 19,234 acres. As in the rest of the district, a thorough redistribution of the waste lands notified in 1879 was necessary both in the interests of the people and of the forest department. The settlement and demarcation officers for various reasons have found it necessary to disforest 7320 acres, reducing the forest area to 11,914 acres or eight per' cent of the sub-division. Sirur is much more fertile than the other eastern sub-divisions and has a much smaller area of unproductive land. The chief forest reserves are, Alegaon 1869 acres, Pabal 1288 acres, Kavdhe 629 acres, Kanur 504 acres, Karandi 712 acres, and Sirur 500 acres.

Purandhar.

The Purandhar forest reserves include about thirty-seven square miles. The chief forest areas, 18,996 acres, are on the range of hills which stretches southeast from Sinhgad to Purandhar and twenty miles further east. The largest forest areas are, Jejuri with 692 acres, Kamra with 759acres, Mandhar with 1205 acres, Sakurde with 1223 acres, Parinche with 1292 acres, Bhongavli with 1593 acres, Kikvi with 1793 acres, Valhe with 2223 acres, and Ghera Purandhar with 3597 acres. Except small teak, chiefly in Shivra, Kamra, Kikvi, and Bhongavli, these forest lands contain nothing but scrub. The forest area of 2202 acres on the range separating the Karha valley in Purandhar from the Mula-Mutha valley in Haveli, includes 366 acres in Bhivdi, 376 in Bopgaon, 800 in Gurholi, 214 in Tekavdi, and 446 in Pande. These lands contain little but poor scrub. There is a small area of river-side groves at Kenjal and elsewhere on the Nira. The remaining 4000 acres is poor upland or mal. The villages with the largest areas of upland are Rajevadi with 246 acres, Hivre with 280, Pargaon with 286, and Rajuri with 319.

Bhimthadi.

Bhimthadi has a forest area of about sixty-nine square miles. About 4402 acres are commanded by the Mutha canal and will probably be given back for tillage, and 1499 acres have been declared unfit for forest. On the other hand a considerable area of arable waste will probably be taken for forest land. Of the demarcated area of 18,585 acres, the most Valuable parts are the river groves on the Bhima, Nira,

and Karha, the best being near Rahu and Pimpalgaon on the Bhima. The details are, Rahu 1610 acres, Pimpalgaon 685 acres, Dahitne 684 acres, Miravde 468 acres, Valki 457 acres, and Delavdi 214 acres. The rest of the forest land is poor upland, bare or with a sprinkling of stunted scrub. The details are, Yevat 448 acres, Undavdi-Karepathar 1043 acres, Varvand 1575 acres, Supa 2838 acres, Vadhane 1084 acres, Pandare 889 acres, Karange 1281 acres, and Patas 2143 acres.

Indapur.

The Indapur forests include about seventy-two square miles. Before the 1st of March 1879, when all the waste assessed or unassessed lands were declared forest reserves, the entire forest area was 10,804 acres out of 345,571 acres, the total area of Indapur. Subsequent additions during 1879 raised the total area to 13,649 acres, Since 1879 a large portion of the arable area which had passed out of tillage during and after the famine of 1876 and 1877 has been taken for forest. During the famine and succeeding bad years, except the rich banks of the Nira in the south, the sub-division lost a large number of its people. Advantage was taken of this opportunity to increase the forest area after making provision for such of the husbandmen as might return and apply for land. The result of the settlement officer's enquiries has been to raise the Indapur forest area to 65,300 acres or about eighteen per cent of the entire sub-division. The villages which have now the largest forest area are Bhelgaon with 6684 acres, Palasdev with 5513 acres, and Kalas with 5574 acres. The Indapur forest lands, though most of them are at present bare, are well suited for babhul plantations.

In 1,81-82 £92 (Rs. 920) were spent in ploughing land and dibbling in seed in more than 250 reserves. Besides thirty tons (40 *khandis*) of mixed seeds collected by forest guards, ninety-six tons (129 *khandis*) of seeds of many kinds were collected in the western sub-divisions at a cost of £81 (Rs. 810). The system of sowing seed broadcast continues to yield good result in certain localities. The forest reserves are protected by a system of fire lines and by close supervision. Still in 1881.82 about ten square miles of forest were burnt. £173 (Rs. 1730) were spent on planting.

Forest Tribes.

Except Katkaris, who come from the Konkan into the west of the district when forest work is to be had and when the wild fruits are ripe, there are no forest tribes. The Kunbis and Marathas who form the bulk

of the people near the Sahyadris, in Junnar, Maval, and Haveli, and the Kolis who are numerous in Khed and round Sinhaad and Purandhar, are husbandmen rather than woodsmen. Nor can the Ramoshis be called a forest tribe. They are chiefly found in the open country to the east and south, though a few are settled as hereditary guards of the hill-forts of Sinhaad and Purandhar. The classes most employed in forest-work are the ordinary field-labourers, Kunbis, Marathas, and Mhars, and to a less extent, Kolis, Katkaris, Thakurs, Dhangars, and Ramoshis. The daily wage of the unskilled labourers employed in forest-work is 4½ d. (3 as.) for a man, 3d. (2 as.) for a woman, and 2¼d. (1 ½ as.) for a boy. During the season (September-November) of wood-felling about 140 men with carts are employed for about three months, and during the season (December-February) of seed-gathering, sowing, and planting, about 200 men are employed for three months. The bidders at the auctions of timber and minor forest produce are chiefly husbandmen and Maratha timber-dealers. Grass is cut and carried by purchasers who employ hundreds of labourers and carts.

Offences.

In 1881-82 there were 306 forest prosecutions against 327 in 1880. Of the whole number 199 were cases of theft, thirty-five of mischief, and seventy-two other cases. Of the prosecutions 57 or 18.6 per cent failed. About £75 (Rs. 750) were recovered as fines and £5 (Rs. 50) were realized by the confiscation of property.

Receipts.

As the chief object of forest conservancy in Poona is to increase the forest area, and as a few of the reserves have any considerable supply of timber fit for the market, the forest receipts are small. In 1870-71 they amounted to £7633 (Rs. 76,330). During the four years ending 1874-75 they ranged between £5718 (Rs. 57,180) in 1874-75 and £3827 (Rs. 38,270) in 1871-72 and averaged £4714 (Rs. 47,140). In 1875-76 they fell from £5718 to £4318 (Rs. 57,180-43,180), and during the five years ending 1879-80 continued to fall to £2290 (Rs. 22,900), and averaged £3381 (Rs. 33,810). In 1880-81 they rose to £3397 (Rs. 33,970), in 1881-82 to £5912 (Rs. 59,120), and in 1882-83 to £8935 (Rs. 89,350).

In consequence of the additional establishment required to protect the increased forest area, the charges rose from £3745 (Rs. 37,450) in 1870-71 to £6446 (Rs. 64,460) in 1881-81 and 1882-83 and averaged

£4430 (Rs. 44,300). These charges include, besides the allowances of forest officers on leave in Poona, a sum of from £1000 to £1800 (Rs. 10,000 -18,000) on account of the pay and allowances of the Conservator of Forests Northern Division and his establishment. The following are the details:

POONA FOREST REVENUE, 1870-1882.

| | Rec- eipts. | C | Charges. | | | | Charges. | | | | |
|-------------|----------------|-----------------------------------|----------------------|--------|-------------|----------------|-----------------------------------|------------|--------|--|--|
| | | Conserv- ancy and Works. | Establish- ments. | Total. | Year. | Rec- eipts. | Conserv- ancy and Works. | Fctablich- | Total. | | |
| | £ | £ | £ | £ | | £ | £ | £ | £ | | |
| 1870- 71 | 7633 | 1261 | 2484 | 8745 | 1876- 77 | 4084 | 1150 | 1732 | 2882 | | |
| 1871- 72 | 8827 | 1818 | 2805 | 4618 | 1877- 78 | 3623 | 1310 | 2025 | 3335 | | |
| 1872- 73 | 4815 | 1394 | 2643 | 4037 | 1878- 79 | 2591 | 1531 | 2913 | 4444 | | |
| 1873- 74 | 4498 | 1841 | 1549 | 3390 | 1879- 80 | 2290 | 2373 | 4812 | 7185 | | |
| 1874- 75 | 5718 | 1350 | 1679 | 3029 | 1880- 81 | 3397 | 3001 | 3485 | 6486 | | |
| 1875- 76 | 4318 | 1256 | 1797 | 3053 | 1881- 82 | 5912 | 2871 | 3575 | 6446 | | |

Timber Trade.

As much timber and firewood as the impoverished reserves can supply and as will command a sale is brought into the market by the forest department and is sold to the highest bidder. There is little if any export of timber; all of the produce is used in the district. Throughout the district there is a good demand for babhul timber, teakwood rafters, and firewood. The best markets are, Poona, Khed, Sasvad, and Junnar. Teak timber is brought up the for pass in carts from Thana and by rail from Bombay. Hitherto the rant Sachiv's state in North Satara has met most of the Poona demand for timber. But its stores of

firewood and timber have been lavishly spent, and the supply is so much reduced that to a considerable extent the Bhor people now depend on the Poona forests. In 1881-82 departmental cuttings were confined to 62,817 teak trees from the forests chiefly of Khed, Haveli, Junnar, and Purandhar, producing about 664 tons (897 *khandis*) or equal to about 12½ cubic feet each and yielding a revenue of £1852 (Rs. 18,520) at a cost of £142 (Rs. 1420); about 1217 tons (1643 *khandis*) from Junnar, Indapur, Sirur, Bhimthadi, Haveli, and Maval, yielding a revenue of £472 (Rs. 4720) at a cost of £31 (Rs. 310); and 59,500 bamboos from Khed and Haveli, yielding a revenue of £54 (Rs. 540) at a cost of £13 (Rs. 130).

Minor Produce.

Myrobalans or *hardas*, of which about thirty-nine tons (53 *khandis*) worth about £157 (Rs. 1570) were collected in 1881 at a cost of about £46 (Rs.460) are the fruit of the Terminalia chebula. They are collected departmentally and sold at temporary stores outside the forests by auction or by tender. Central stores for groups of villages are established at Bhushi, Uksan, Kusur, and Kurvandi in Maval; at Ambegaon, Rajpur, Kushere, Vandre, Tokavde, Amboli, and Bhavargiri in Khed; and at Pimpalgaon, Rajur, and Inglun in Junnar. The people are invited to gather the fruit and bring it to the stores. The price varies from £6 to £8 (Rs. 60-80) a ton. It increases as the season advances because as less fruit is left on the trees the work of collection gross heavier. The longer the fruit is allowed to remain on the tree the heavier and the more valuable it becomes. Shikekai are the pods of the Acacia concinna. The tree flowers in October and November, the pods appear in December, and are ready for picking in February and March. They are much used by the people as a hair-wash and have also healing properties. Other minor produce are, the bark of the chillari Caesalpinia sepiaria and shemb Caesalpinia diggna; the pods of the bahva Cassia fistula, the leaves of the apta and timru used for making cigarettes; palm-leaves and teak-leaves used in thatching; moha flowers used in distilling; gum; and honey, all of which are brought into the Poona, Khed, Junnar, and Talegaon markets and produce a yearly revenue of about £50 (Rs. 500). There has been a great increase in the quantity of grass in the forest reserves. Fifteen years ago nearly the whole of the important river-side grazing reserves were choked, with prickly pear, the whole of which has been removed. Grass and grazing are becoming a considerable source of revenue. Exclusive of the grass supplied to the Commissariat at Poona of the value of £1100 (Rs. 11,000), and the grazing free of charge from the reserved forests of the value of £927 (Rs. 9270) to the

Government cattle farm at Aligaon, the grass and grazing revenue was £141 (Rs. 14,170) in 1877-78, £525 (Rs. 5250) in 1878-79, £727 (Rs. 7270) in 1879-80, £1570 (Rs. 15,700) in 1880-81, £3198 (R.31,980) in 1881-82, and £3941 (Rs. 39,410) in 1882-83.

Roadside Trees.

[Contributed by Mr. J. G. Moore, C. S.] The commonest roadside trees are, the babhul, pimpal, vad, nandruk, pimpri, karanj, tamarind, limb, mango, jambhul, and umbar. The vad, nandruk, pimpal, pimpri, and umbar, all belong to the fig tribe, and as with the exception of the pimpal they can be propagated by cuttings they are the commonest of Poona roadside trees. In growing roadside trees the planting of cuttings is the system which has been most generally adopted. Young branches full of sap and with air-roots are chosen. They have generally been about five feet in length, but during the last three years very much longer cuttings varying from twelve to sixteen feet long have been planted. The interval between each cutting is about twenty feet. The cuttings do not require hedges as a protection and so far they are more economical than seedlings. A bundle of thorns is tied round the pole about four feet from the ground to prevent horned cattle rubbing against them. The cuttings are planted with about three feet in the ground. In the western and central belts they are watered once a week from January till the monsoon breaks early in June, and in the east for about nine months. After easterly storms, and so long as their moisture lasts, watering is discontinued. Cuttings can be planted at any time of the year. If they are planted in the interval between two south-west monsoons (October-June) they must be regularly watered, while if they are planted at the beginning of the south-west monsoon (June 1st-25th) they can do without water for six months. Latterly the seedling system has been tried but with very doubtful success, except where recourse has been had to artificial watering. The plan is to procure a large number of pots, to fill them with earth, and as soon as the first rain falls to plant them with seeds of mango, jambhul, limb, karanj, pimpal, and tamarind. The pots are placed in nurseries at carefully chosen sites where there is a fair shade with water close at hand. The seedlings remain in the nursery for twelve months, care being taken to shift the pots from time to time so that the roots may not strike into the ground. Meanwhile pits are dug at intervals of twenty feet on either side of the roads, and living hedges of milk-bush or of the kanda nivdung Condelchra cactus are planted round the pits. After exposure for ten or eleven months the pits are filled with good earth and are ready to receive the seedlings. At the beginning of the south-west monsoon the seedlings are planted pot and all, the pot

being first broken. They thus get four or five months' rain and they are then supposed to thrive without any artificial moisture. In the western and central belts about forty per cent thrive, but in the eastern belt the plan is an utter failure, owing to the uncertain and scanty rainfall, and resort must be had to artificial watering. The watering of young trees requires constant care. It is essential that the soil round the roots should be constantly loosened so as to allow the water to pass to the root; otherwise after one or two waterings the soil becomes as baked as a sun-dried brick. No moisture can pass, and the cutting or sapling either withers or its roots instead of going into the soil come to the surface and having no hold the plants are blown over. To bury a porous earthen vessel close to the tree so that its throat is on a level with the surface is an economical way of watering. If filled weekly the water gradually soaks into the soil and keeps it moist. The top of the vessel must be covered to prevent evaporation and the vessel must be buried deep or the roots will come too near the surface.

Trees.

Ain or Sadada.

The following is a list of the chief Poona trees. [Contributed by Mr. W. H. A. Wallinger, District Forest Officer.] Ain or sadada, Terminalia tomentosa, is a straight and high growing forest tree. It yields good timber and fuel. The bark is astringent, yields a black dye, and is used in tanning. The bark ashes produce a kind of cement which is eaten with betel-leaf in the Madras Presidency. It is one of the commonest trees on the Sahyadris, and on the wooded hills and uplands in the west of the district. Boma, also called ain, Terminalia glabra, is equally plentiful with the ain, and differs from it only in having a smoother bark. T. bellerica is one of the largest and finest looking trees in the Poona forests.

Allu.

Allu, Vanqueria spinosa, a wild fruit tree, is found on the western hills. Its fruit is often brought to the Poona market. The stem is covered with large thorns and the wood has no special value.

Amba.

Amba, Mangifera indica the Mango, is found in gardens and fields both in the hilly west and in the level east. The mango grows sixty or seventy feet high, has a straight trunk and a dark rough bark, and

gives excellent shade. [In 1837 Colonel Sykes noticed a mango tree at Bhimashanker called the Raja, which was fully eighty feet high and from which boards could be cut thirty feet long and three or four feet wide. Report of the British Association for 1837, 255.] It flowers at the end of January or the beginning of February and fruits in May and June. The wood, which is coarse-grained and suffers from the attacks of white-ants and other insects, is much used for planks and building and as firewood. The flowers are held sacred and are offered to Shiv. Especially in years of scarcity the mango is a valuable addition to the food supply of the district. Besides when it is ripe, the fruit is used unripe in pickles and relishes and the kernel is boiled and eaten. Poona mangoes go in large quantities to Bombay and other places from the gardens at Shivapur near Poona where the shekda or hundred contains three hundred and twelve mangoes. The fruit can be greatly improved by grafting. Ambguli, Elaeagnus, a wild tree, which grows largely on the western hills, yields a palatable fruit, in taste like a gooseberry. The fruit is cooked and used in curries and relishes and also as a vegetable.

Ambada.

Ambada, Spondias mangifera, is a cultivated fruit tree found chiefly in the west of the district and on the Sahyadri slopes. The wood which is soft is burnt as fuel. The fruit is eaten when ripe and is used in curries and pickles. It also yields a saleable gum.

Anjir.

Anjir, Ficus carica, the Fig, is largely grown, especially in the Haveli, Purandhar, Junnar, and Khed sub-divisions. It is raised almost always from cuttings which when four or five feet high are planted in garden land. It requires a richly manured and freely watered soil. The crop is apt to suffer from blight and other diseases. There are no grafted figs in the district, and an attempt to introduce graft figs failed. November and December and April and May are tie bearing seasons and it is only during these months that the fig requires frequent watering. It begins to bear in its fourth year, is in its prime from its sixth to its, tenth year, and continues bearing until it is fifteen years old. The ripe fruit is used locally and is sent to Bombay. Poona figs are never dried.

Avla.

Avla, Phyllanthus emblica, is a wild tree which is found throughout the district, growing thirty or forty feet high. It is useful in planting bare

hill-sides. It is also raised in the east of the district in gardens and round temples. Its healing qualities have made it sacred. Krishna wears a necklace of *avla* berries and with tamarind and sugarcane *avla* is offered to Krishna in October-November when he marries the *tulsi* plant. The sacredness of the fruit is probably the reason why stones deep grooved like a dry *avla* berry are so favourite an ornament in Hindu temples. As the wood is hard and somewhat brittle it is little used. The fruit which ripens in the cold weather is in size and appearance much like a gooseberry. It is ribbed like a melon and is of a semi-transparent yellow. It is very sour and astringent. It is cooked or preserved and used in pickles. In a dried state it is called a*valkathi* and is considered an excellent cure in bilious complaints. It is also used in making ink. The bark which is used in tanning, is very astringent.

Vilayati Avla.

The *vilayati* or foreign *avla*; Caretonia siliqua, is a low spreading tree, bearing large fruit which contains much sugar and is valued as cattle fodder. The tree thrives in irrigated land. It begins to fruit when five years old.

Asan.

Asan, Briedelia retusa, is a forest tree common in the hilly west. B. spinosa, which is also plentiful, differs from B. retusa in being more thorny. The leaves are used as a cure for worms.

Apta.

Apta, Bauhinia racemosa, is found both on the western hills and in the eastern plains. B. alba or the white kanchan and the B. acuminata or the red kanchan, which differ little from B. racemosa, are also plentiful. Ropes are made of the bark of B. racemosa and the leaves are much used for native cheroots. The apta is worshipped by Hindus on Dasara Day in October. The bark is applied to swellings of the limbs and its juice is given internally as a remedy for jaundice Bauhinia tomentosa is also fairly plentiful. The roots are prescribed in certain cases of flux and for inflammation of the liver.

Babhul.

Babhul, Acacia arabica, is the commonest and most generally useful tree in the district. It is found in all the sub-divisions, but sparsely

towards the west. It is very hardy and grows rapidly in black soil and on the banks of rivers. It grows to a considerable size and has excellent, hard, close-grained, and lasting wood; but the timber is generally crooked, and straight pieces of any length are seldom found. The wood is used as cart-axles, ploughs, and sugarcane-rollers, as well as for fuel. It also makes excellent charcoal. The bark is valuable in tanning and yields a good yellow dye, and its sap is a useful gum worth about 4d. a pound (6 pounds the rupee) in the local markets. The long seed pods are eagerly eaten by sheep, goats, and cattle. At Manchar, about fourteen miles north of Khed, in 1837, Colonel Sykes noticed a babhul whose trunk eighteen inches from the ground measured nine feet round. Its head was branching, and, with a vertical sun, shaded nearly six thousand square feet. A variety known as vedi or wild babhul, Acacia farnesiana, is found chiefly in the eastern and central plains. It yields sweet flowers from which a perfume is distilled. The wood is used for fuel but not for building, as it is soon attacked by insects. The bark contains tannin and is made into the tassels which adorn bullocks' heads on *Pola* or the Bull-day. The gum is also useful [In 1839-40, Government offered land free of rent for planting babhul tress in Indapur. By 1842-43 the plantations extended over 2200 acres and contained 19,000 trees. Rev. Rec. 1241 of 1841, 83 and 1568 of 1844, 90.1

Badam .

Badam, the Almond, Prunus amygdalus, is grown in gardens but is not common. It gives good shade and the fruit when ripe is eaten by children and the lower classes, but it is never dried and has no trade value. The kernel of the fruit is wholesome and pleasant to eat.

Bhava.

Bahva, Cassia fistula, is largely found on the central and western hills and uplands; in the east it is scarce. It is one of the most ornamental of forest trees, throwing out in the hot weather long tassels of beautiful pimrose-yellow flowers much like the laburnum. Its long hanging pods are also easily recognized. The wood though close-grained and hard is not much used. The bark serves in tanning, the roots yield a purge, and the seeds are embodied in a pulp which is used as an aperient both in India and in Europe.

BeL.

Bel, AEgle marmelos, a highly ornamental tree, twenty to forty feet high, is common all over the district both wild and in gardens. It has an excellent hard wood which is used for making native drums, but the tree is seldom cut as it is sacred to Shiv, it is said, on account of its fragrant flowers and aromatic leaves. Its fruit, which is about the size of an orange, has a woody shell and a sticky pulp. It is seldom eaten raw but it makes a delicious syrup and a pleasant preserve and pickle, and has valuable healing properties. Prepared in certain ways it acts as an aperient, in others as an astringent, and is useful in cases of dysentery or diarrhoea. The root, bark, and leaves, are also used in making cooling applications. The aromatic leaves are offered to Shiv, especially in the month of *Shravan* that is August, and on the *Mahashivaratra* in February. The wood is sometimes burnt with the dead and the fruit made into snuff-boxes. The seeds yield a varnish.

Bhokar.

Bhokar, Cordia latifolia, is grown as a fruit tree in the west of the district. It is usually small seldom more than thirty feet high. It has valuable white wood which is used in boat-building and makes excellent fuel. The bark is made into ropes and fuses and the leaves are used as plates. The young leaves and unripe fruit are eaten as a vegetable. The fruit is pickled and is eaten when ripe; it is greedily devoured by birds. Its sticky pulp is used as birdlime and is considered a valuable remedy in lung-diseases.

Bibba.

Bibba, the Marking-Nut, Semecarpus anacardium, is a wild tree common on the central and western hills. The calyx or covering and the kernel of the nut are eaten. The green fruit when pounded makes good birdlime. The oil of the nut is used for marking linen, the colour being made fast by mixing it with a little quicklime water. It acts as a blister and some drops given in milk or butter are useful in diarrhoea. It is applied as oil to the axles of country carts. The juice is so harsh and bitter that woodcutters burn the bark before they cut the tree.

Bondara.

Bondara, Lagerstraemia lanceolata, is abundant in the western hills. It differs from *nana* in having smaller leaves. The wood is light brown close-grained and elastic; in the west it is much used for housebuildings.

Bor.

Bor, Zizyphus jujuba, is common in cultivated lands and over nearly all the centre and east of the district. The tree is of spreading habit, coppices readily, and sometimes grows thirty feet high. It is very thorny. The fruit which ripens in the cold weather resembles the crabapple in flavour and appearance. It is never larger than a gooseberry and is much eaten. The bark is used in tanning and is a great favourite with the lac insect. Grafting greatly improves the taste and size of the fruit. It is dried and pounded by the natives and eaten with vegetables, the dried powder being called borkut. The wood, which is used for cabinet work, for saddle-trees, for field-tools, and for wooden shoes is tough and lasting, and as it is not affected by insects, might prove useful for railway sleepers. Ranbor, Zizyphus vulgaris, is a variety with a smaller fruit found on the eastern hills and tablelands. Ghotbor, another variety, is common in the west and is occasionally found in the east. It seldom grows to be more than a shrub. The wood is used for torches, and the burnt fruit by shoemakers' to blacken leather.

Bakul.

Bakul, Mimusops elengi, is found throughout the district and is specially common in gardens and near temples. Its sweet-smelling cream-coloured flowers yield an oil which is used in perfumery; the fruit is eaten by the poor, and the bark is an astringent and tonic. The wood is very hard and lasting, and is used for house-building and for furniture. Probably from the sweetness of its flowers and its healing properties, the bakul is sacred. It was under a bakul tree that Krishna played to the milkmaids, and its sweet flowers, which are called the flowers of paradise, are offered both to Vishnu and to Shiv.

Bartondi.

Bartondi, Morinda citrifolia, is common in the east and centre of the district, but is rare in the west. It is a small tree seldom more than twenty to twenty-five feet high. *Manjishta,* M. tinctoria, which differs little from the *bartondi,* also occurs in the district. The root of both varieties yields a valuable dye which is much used in colouring turbans and carpets. Its close-grained, light, and tough wood makes good wooden shoes or *khadavas.*

Chakotar.

Chakotar, the Citron, Citrus decumana, is largely cultivated throughout the district. It grows thirty or forty feet high. The fruit is large pale-yellow and pear-shaped, with a thick rind and a pink or crimson and sweet or acrid pulp. The leaves are used for flavouring dishes and the rind of the fruit yields an oil which is used in perfumery. The rind is also an aromatic stimulant and tonic. The juice of the fruit forms a refreshing drink.

Chandan.

Chandan, the Sandal tree, Santalum album, is occasionally found throughout the district, both cultivated in gardens and near temples, and wild. It grows readily from seed but suffers much by transplanting. The heartwood is famous for its scent. When rubbed to powder, with or without other ingredients, it is used as a cooling unguent and in preparing Hindu sect-marks. Trees grown on rocky and poor soils yield much more heartwood than those on rich alluvial land. The oil distilled from the wood is a medicine and perfume. The wood is used by the rich to burn the dead, the poor and middle classes contenting themselves by throwing a log or two on the funeral pyre. The wood and the saw-dust are burnt as incense in Hindu and Parsi places of worship. The wood is also made into beautiful fancy articles. The ripe fruit, chandan charoli, is eaten by the poor.

Char.

Char, Buchanania latifolia, is a wild fruit tree found on highlands both in the east and in the west of the district. The wood is tough and the bark is used for making ropes and *gondas* or ornaments tied to the necks and horns of bullocks. The bark is used by tanners. The stones of its cherry-like fruit or *charoli,* which abound in oil; are eaten roasted or pounded and are used in confectionery and other cooking.

Chinch.

Chinch, the Tamarind tree, Tamarindus indicus, both in the hilly tracts and in the plains, is commoner than any other large cultivated tree except the mango. It grows sixty or seventy feet high and gives abundant shade. Its tough and lasting wood is used for cart-wheels and oil-mills and is valued for burning bricks and tiles. It makes excellent charcoal for gunpowder. The fruit, which ripens in February, is salted and stored in almost every house. The pulp of the fruit when preserved in sugar makes a cooling drink. The seed is fried and eaten by the lower classes; in seasons of famine it is ground to flour and

made into bread. From the seed is also prepared a size which is used by wool-weavers, saddlers, and book-binders.

Chapha.

Chapha, Michelia champaca, is common throughout the district on wooded hills and tablelands and is also grown in gardens and near temples. The leaves are used as dining plates or *patravalis* and the wood is used as fuel. The milky juice is valuable in certain skindiseases.

Dalimb.

Dalimb, the Pomegranate, Punica granatum, of two kinds, is grown in gardens throughout the district and is valued for its fruit, and for the healing properties of its root, leaves, bark, flowers, and fruit rind. The bark of the root is used as a cure for worms and the juice of the fruit forms a pleasing and cooling drink. It bears in November-December and again in April-May, and only when bearing does it require much watering. During the rest of the year an occasional watering is enough. The tree begins to bear in its fourth year; it is in its prime from its sixth to its tenth year; and under favourable circumstances continues to fruit till it is fifteen years old.

Dhaman.

Dhaman, Grewia tiliaefolia, which flourishes near the sea, is also .found in Poona. It is common in the forest lands in the centre and west, and is occasionally found on the eastern uplands. Its tough and elastic wood is used in house-building and is good for bows and for carriage-shafts. The berries have an agreeable bitter taste, the bark makes cordage, and the leaves are good fodder.

Dhavda.

Dhavda, Conocarpus latifolia, one of the commonest and most useful timber trees, is plentiful in the west and centre and is occasionally found in the east. Its tough wood is much used in house-building and for field-tools and cart-axles. If not properly seasoned it is apt to be attacked by white-ants.

Gehela.

Gehela, Randia dumetorum, a shrub rather than a tree, is plentiful in the western hills and valleys, but is not found in the east. The wood is used as fuel and the fruit as an emetic and a fish poison. Gondhan, Cordia rothii, is plentiful in gardens and forests. It differs from the bhokar in having narrower leaves and red fruit.

Gorakh-Chinch.

Gorakh-chinch, the Baobab, Adansonia digitata, occurs in a few gardens. The seeds are surrounded by a starchy pulp with an acid flavour which forms a wholesome and agreeable article of food, and is regarded as a specific in putrid and pestilential fevers and a valuable medicine in dysentery. The powdered leaves applied to the skin are used to check excessive perspiration. The bark is also an antidote to fever, and its fibres are used in making cordage. The tree is remarkable for the enormous size of its trunk.

Harda.

Harda or hirda, Terminalia chebula, is plentiful on the western hills. From its value in tanning and dyeing the nut is in great demand in Europe. Of late years, since the demand has become constant, the people in the west preserve their harda trees and refrain from lopping them for ash-manure. A rise in the price of harda nuts would do more than almost any measure to clothe the sides of the western hills. A decoction of bruised myrobalans is a safe and effective aperient. It is also useful in skin-diseases.

Hallian.

Hallian, Eriodendrum anfractuosum, though not plentiful, is found in the thicker forests on the western hills. The light and soft wood is used in tanning leather and for making toys. The fine soft silky wool which surrounds the seeds is used for making cushions. It yields a gum called hallianke gond which is valued in bowel-complaints.

Hedu.

Hedu, Nauclea cordifolia, is found only in the west and even there is seldom of any size. Its soft, yellow, close-grained wood is used in house-building and for other domestic purposes.' The leaves are a valued remedy for children's stomach complaints. The yellow flowers of the Nauclea kadamba are sacred to Krishna who is said to have

played with the milkmaids under a *kadamb* tree. The flowers are imitated in native jewelry.

Hinganbet.

Hinganbet, Balanites egyptiaca, is a thorny wild tree often growing thirty feet high. It is common in the east, in wooded Kills, plains, and tablelands. Its bitter leaves are used in medicine, and its wood as fuel and for making shoe-moulds. The unripe fruit is bitter and purgative. The ripe fruit is eaten by the poor. The seeds yield an oil and the bark a juice with which fish are poisoned.

Hivar.

Hivar, Acacia leucophloea, is found in the centre and still more commonly in the east of the district. Its hard but somewhat brittle wood makes good posts and excellent fuel. The bark supplies a tough and valuable fibre for fishing-nets and ropes. Brahmans do not touch this tree as they believe it is haunted by an evil spirit who occasioned the quarrel between Dasharath, king of Ayodhya, and his wife, which led to the banishment of Dasharath's sons Ram and Lakshman.

Hura.

Hura, Symplocos racemosa, is a small wild tree seldom more than twelve or fifteen feet high. It is found in the deeper forests of the western hills. Its yellowish strong and compact wood is much used in cabinet work. The bark is used in dyeing and as a mordant, and yields the well known scented *abir* powder.

Jayphal.

Jayphal the wild-nutmeg, Myristica dactyloides, is sometimes grown in gardens. It has much less stimulant and narcotic power than the Java nutmeg.

Jamb.

Jamb, the Rose-apple, Eugenia jambos, is a garden tree. It is of two kinds red and white, of which the white is the commoner and at the same time the more highly esteemed. The bark yields a gum.

Jambhul.

Jambhul or Jambhal, Syzigium jambolanum, is a very common tree both cultivated and wild. It is found throughout the district but chiefly in and on the borders of the hilly west. It bears a small purple plumlike fruit which ripens in May and June and is much eaten. The tree grows twenty to fifty feet high with straight clean stem and glossy deep-green leaves. Its hard and reddish wood is valued for its power of resisting the action of water. It is much used in native house-building, and for cart-frames and field-tools. The bark yields an excellent brown dye and is used as an astringent in chronic diarrhoea and dysentery.

Khandul.

Khandul, Sterculia urens, is rare in the east and is not common in the west. It yields a gum like the tragacanth and the leaves and twigs are used in cattle-disease. Its soft spongy wood is of no special value. The bark supplies excellent fibre for ropes.

Karanj.

Karanj, Pongamia glabra, is a forest as well as a road and river-side tree. It is fairly plentiful throughout the district, thriving best on riverbanks and near water. The tree sheds its leaves at the end of the cold season. It is almost at once reclothed in a beautiful covering of fresh pale green, and when the fresh leaves are mature it comes into flower, and fruits at the end of the year. The wood is light tough and fibrous of a yellowish brown, and if not properly seasoned is soon attacked by insects. Its fruit yields an oil which is used for lamps and valued as a cure for rheumatism and for itch and other skin-diseases. The rind or pend of the bark is pressed and rolled by Pinjaris or cotton-teazers into a felt. Grass grows well under the shade of the karanj.

Kalamb.

Kalamb or *kadamba*, Nauclea parvifolia, is common in wooded lands both in the east and west. Its strong dark and close-grained wood is used in house-beams.

Kamrak.

Kamrak, better known as country gooseberry, Averrhoa karambola, is of two sorts sweet and bitter. The bitter variety is chiefly used in pickles and preserves. The ripe fruit is yellow about two inches by one inch broad, and is so deeply indented that its cross section has the

shape of a four-rayed star. Two crops may be produced by watering during the year.

Kaju.

Kaju, Anacardium occidentale, is found in the western hills. The wood makes excellent charcoal. The walls or pericarp of the seed contain a bitter oil which has powerful blistering properties. The enlarged crimson or yellow fruit-stem is also eaten and has a pleasant sour flavour. The raw kernel is unpleasantly bitter, but when fried it is much prized in confectionery. In the Konkan a medicinal drink is made from the enlarged peduncle of the fruit. The trunk yields a transparent gum which is used as a varnish and is said to keep off insects.

Karvand.

Karvand, Carissa carandas, is a large evergreen shrub found in the wooded parts of the central and western hills. The half ripe fruit is made into tarts, jellies, and pickles, and the ripe berry is largely eaten.

Kavath.

Kavath or Kut, the Wood-apple, Feronia elephantum, is found throughout the district both in forests and in gardens. It grows forty or fifty feet high and has beautiful dark-green leaves. It yields a large quantity of sweet gum which is used as a tonic. The fruit is round, three to four inches in diameter, with a hard woody shell, and yellow pulp containing the seeds. When ripe it is eaten with sugar, and when green it is made into relishes and pickles. The pulp also makes excellent jelly. The wood is lasting and useful and the leaves are used in children's bowel-complaints.

Khajuri or Shindi.

Khajuri or Shindi, the Wild Date, Phoenix montana and sylvestris, is plentiful in the western hills and is also found in gardens. It grows thirty to forty feet high. The fruit when ripe is of a reddish yellow and has a sweetish and astringent pulp. Mats, baskets, and brooms are made of the leaves which are also used in thatching, and the juice drawn from the young shoots is either fermented or boiled into sugar and molasses. The wood is used for building, for water-pipes, and for other purposes.

Kel.

Kel, the Plantain, Musa paradisiaca, is perhaps commoner than any fruit except the mango. They are planted in gardens at any time of the year and require a rich soil and water once in ten or twelve days. They fruit only once and after twelve months are cut down. Fresh shoots spring from the root and again fruit. The trees are generally removed when they have once sent up shoots and borne fruit. The flower, the unripe fruit, and the young shoots are all eaten as vegetables. Hindus use the leaves as dining plates and for making native cheroots or bidis. They are also valued for dressing blisters. The fruit, of which there are three varieties, a small yellow, a large yellow, and a large red, is an important article of food and the juice is sometimes made into a fermented liquor. The stem fibres are useful to gardeners in budding and grafting and are also used in making paper. The wild plantain, chavai, grows freely in the Sahyadris.

Kenjal.

Kenjal, Terminalia alata, is a common tree. The bark contains tannin and the wood which is very good is supposed to be improved by keeping it under water.

Kadu Kharik.

Kadu Kharik, Solamen jacquini, is found only in the western hills and uplands. Its heartwood yields a medicinal oil and its fruit is used as a cure for children's bowel-complaints.

Khair.

Khair, Acacia catechu, is fairly plentiful on wooded uplands and hills. It has a dark red wood, somewhat brittle but of great strength which is not attacked by insects and takes a good polish. It is useful for all house and field purposes, especially in making ploughs, pestles, and cart-frames. From its heartwood is extracted the powerful astringent called *kat* which is so much eaten with betel-leaf and used in medicine, dyeing, and painting. It is made by the Katkaris and Thakurs of the petty division of Ambegaon. In making catechu, chips of the heartwood are boiled in earthen pots, the clear liquor is strained off, and when of sufficient consistence is poured into clay moulds. *Kat* is made to a very small extent in the Poona district.

Limbu.

Limbu, the Lemon, Bitens limmoun, is common in gardens. It is grown in much the same way as the guava and the fig. It is seldom more than fifteen feet high. The fruit is to be had all the year round and is in great demand for its juice which is used in making drinks and in all kinds of cookery. The unripe fruit is often pickled and the rind and juice are used medicinally. The Sweet Lime, sakhar-limbu, Citrus lamiata, is much larger than the common lime and though insipid is a great favourite with the people. It sometimes grows twenty or twenty-five feet high. The rind yields an oil which is used in perfumery.

Lalai, Albizzia amara, is largely found throughout the district on wooded hills and in plantations. The wood is dark-brown, strong, and fibrous, and is commonly used as fuel and in making ploughs and carts. The leaves are used as a hair-wash.

Makar Nimbori.

Makar Nimbori, the Wild Citron, Attantia monophylla, is found near the Sahyadris. It is a handsome tree, but the cultivated fruit is so abundant that the wild variety is not used. The wood is white, very fine, and close-grained; it is useful for cabinet purposes.

Maruk.

Maruk, Ailanthus excelsa, not unlike the English ash, is found both in the west and east of the district but is not plentiful. The wood is soft but close-grained, and is used for water-pipes, drums, sheaths, spears, and swords.

Mahlung.

Mahlung, Citrus medica, is much grown in gardens throughout the district. Its fruit which is as large as a cocoanut is used in medicine. The kernel is eaten and preserved. The leaves are used in flavouring and the rind is an aromatic stimulant and tonic, and yields an oil which is used in perfumery. The juice of the fruit is a refreshing and agreeable beverage.

Moha.

Moha, Bassia latifolia, is found in the west and central hills and uplands. Though a forest tree, it is sometimes grown in gardens, especially near the Sahyadris. Its young ruddy-bronze leaves are one of the greatest ornaments of the western forests at the beginning of

the hot season. Its chief value lies in the thick fleshy bell-shaped flower which when dried is eaten and distilled into spirit. Almost every animal, wild or domestic, eats the fresh flowers; the fruit is chiefly used as a vegetable. The wood, though easily attacked by white-ants is hard and lasting, but the tree is too valuable to be cut for timber. It is used for naves of wheels, frames of doors and windows, and other purposes. The seed when allowed to form is enclosed in a thick walnut-like pod. It yields an excellent oil, good for food and burning and also for skin-diseases, and is used in making candles and soap. It is also used in adulterating clarified butter. The leaves and bark are useful in fomenting a wound. The bark yields a brown dye, and the leaves are made into plates or *patravalis* which are used chiefly at religious feasts.

Nagchapha.

Nagchapha, the Cobra Champa, Mesna ferea, is found in some of the western hills and uplands. The reddish wood which is known as ironwood is said to be the heaviest and hardest timber in India. The dried anthers or fertilizers are fragrant; the flowers are used to deck women's hair, and the flowers and leaves as antidotes to poison.

Nana.

Nana, Lagerstraemia parviflora, is abundant in the western hills. It is a straight-growing tree which yields a much used timber.

Naral.

Naral, the Cocoa-Palm, Cocos nucifera, is sometimes grown in gardens as an ornamental tree. Though in the Deccan it is seldom vigerous, in 1837, Colonel Sykes found a flourishing palm garden at Mahalunge near Chakan, and clumps of cocoa-palms at Pabal eighteen miles west of Sirur, and in other places. The cocoanuts, kernel, and oil used in the district all come from the coast.

Narina.

Naring, the Orange, Citrus aurantium, is grown in garden lands in considerable quantities and in much the same way as the pomegranate and the fig. The chief varieties are the *mosamb* or Mozambique and the *santra* from Cintra in Portugal. The orange tree is remarkable for the enormous number of fruit it yields, one tree sometimes bearing many as 1000 oranges a year. The leaves are used

for flavouring and the rind of the fruit yields an essential oil valued in perfumery and as an aromatic stimulant and tonic. The juice of the fruit is a refreshing and agreeable beverage.

Limb.

Limb, Azadirachta indica, known as the Indian Lilac, is found throughout the district. It is one of the commonest of garden and road-side trees, being grown chiefly for shade and ornament. The wood is hard, lasting, and useful for furniture. The heartwood of old trees has a fragrance like sandalwood and is used for building. Its boiled leaves and fruit yield a bitter and cooling drink useful in fevers and small-pox. The leaves are also used as a poultice and are eaten by Hindus with gram and molasses, on the Shalivahan New Year's Day, the 1st of *Chaitra* in April. The bark is used as a medicine and oil pressed from the seed in rheumatism.

Pangara.

Pangara, Erythrina indica is plentiful in the western and central woods and is grown in gardens as a prop for the betel-vine. Its soft spongy wood is used for making toys and moulds of shoes. The flower is supposed to have been stolen by Krishna out of Indra's heaven and is now under a curse and is never used for worship.

Palas

Palas, Butea frondosa, is common in the west and centre and is occasionally found in the east. At the beginning of the hot season it is a mass of bright scarlet blossoms. The leaves are much used as plates and the young shoots are eaten by camels and other animals. The wood is strong and tough and makes excellent charcoal. The stem yields kino gum which is valued in diarrhoea and dysentery and for tanning, the flowers yield a valuable dye, and the root and bark excellent tough fibre. The juice is also used in medicine. The palas is a favourite with the lac insect and the best lac is found on it. The seednut is given to horses as a purge and to free them from worms.

Papai.

Papai, Carica papaya, is fairly common in gardens both in the plains and in the north-west of the district. The tree has much of the general appearance of a palm, the fruit and leaves clustering at the top of a straight bare stem. With water and manure it bears three times in the

year. The fruit is eaten both raw and cooked. The juice of the unripe fruit and the powdered seed are valued as a cure for worms. The tree has the power of quickening the decay of flesh and newly killed meat is hung on it to make it tender.

Papnas.

Papnas, the Pomelo or Shaddock, Citrus decumana, is not common except near large markets. It is grown only in gardens and requires a rich soil and constant watering. It grows fifteen feet high and if constantly watered bears twice a year.

Peru.

Peru, the Guava, Psidium guava, is grown throughout the district in garden lands and thrives best in light soil. It is of two kinds red and white, the white being the more esteemed. It is common throughout the plain country and on the borders of the hilly west. November and December, and April and May are its bearing seasons, and it is only in these months that it requires frequent watering. During the rest of the year an occasional watering is enough. The tree begins to bear in its fourth year; it is in its prime from its sixth to its tenth year; and under favourable circumstances goes on bearing till it is fifteen years old. It is seldom over fifteen feet high and is of a spreading bushy habit. The fruit is much eaten both raw and in several kinds of preserves and jellies. The hark is astringent, and the wood hard strong and lasting. It is useful for cabinet purposes.

Phanas.

Phanas, the Jack, Artocarpus integrifolia, is not a common tree. It is grown in gardens and is found wild near the hilly west. It grows forty or fifty feet high, has dark glossy foliage, and yields valuable timber. It is of two kinds, *kapa* a superior variety, and *barka*, which yields a kind of cake called *phanaspoli*. Stripped of its thorny cover the unripe fruit is eaten as a vegetable, and when ripe, as a fruit. It is also valued as a poultice for guinea-worm. The leaves are used as plates. The seeds are eaten parched or mixed with vegetables, and the juice makes good birdlime. The heartwood yields a yellow dye.

Pila Dhotra.

Pila Dhotra, the Mexican Poppy, Argemone mexicana, is found throughout the district in fields and near villages. The seeds are

narcotic, and their oil which is an aperient is used as a cholera remedy and to cure skin-diseases.

Pimpal.

Pimpal, Ficus religiosa, is sacred, perhaps from its smooth ghost-white stem and branches and the windless rustling of its leaves. Among Buddhists it is the symbol of Gautama the last Buddha. It is commonly believed to be the abode of a *munja* or Brahman youth who has been girt with the sacred-thread but has not been married and so is uneasy and feared. It is also apparently worshipped as a *ling*. It is girt with the sacred-thread and is surrounded by a stone plinth, and Hindu women often walk many times round it to get rid of the evil spirit of barrenness. Its leaves are a favourite food for camels and elephants and are much liked by the lac insect. Its rapid growth and thick shade make it a useful roadside tree. Except as fuel the wood is of no value.

Pimpri.

Pimpri, Ficus comosa, is found throughout the district. It is much like the *pimpal* and as it grows easily from cuttings is a useful roadside tree.

Ramphal.

Ramphal, the Bullock's-Heart fruit, Anona reticulata, a larger variety of the custard-apple, is common in the western and central sub-divisions, chiefly in gardens, and is much valued for its fruit. In good soil it sometimes grows forty feet high. The full grown fruit is as big as a cocoanut and has a sweet smell. The leaves have a fetid odour and when beaten to pulp are used to kill lice on cattle. Its aromatic flowers are offered to the gods.

Ramkanta.

Ramkanta, the Broom Babhul, Acacia ramkanta, is a tall tree in shape like a huge broom. Though less abundant than other varieties of babhul it is common all over the district except in the far west. The wood is much used for cart-yokes and as fuel, and the bark in tanning.

Ratambi.

Ratambi, Garcinia purpurea, is a large tree which is found occasionally near the Sahyadris. The fruit which is offered for sale in most markets is used as an acid.

Ray-avla.

Ray-avla, Cicea disticha, is a cultivated tree. The fruit is eaten as a pickle.

Rui.

Rui, Calotropis gigantea, is found throughout the district on wooded hills and in plantations. It is valued for the medicinal properties of its root bark and leaves. The bush is sacred, its flowers and leaves being offered to the gods and used in certain religious ceremonies. The wood makes excellent gunpowder charcoal. C. procera, a similar species, is also plentiful.

Sag.

Sag, the Teak, Tectona grandis, is found only in the Konkan near the Sahyadris and in the belt of country between about ten and twenty-five miles east of the Sahyadris in Junnar, Khed, Maval, Haveli and Purandhar. It is easily raised from seed and in a moist climate is of rapid growth. As a timber tree it is unrivalled and is much valued. The wood is very hard but easily worked, and though porous is very strong and lasting. In colour it varies from yellowish to white-brown. It is very oily when fresh, yielding a good oil somewhat like linseed-oil which is used as a varnish. The large leaves are used for lining roofs under thatch.

Sagargota.

Sagargota, Caesalpinia bonducella, is a wild tree which is specially plentiful in the west. Its bitter seed and the bark are used in intermitent fevers as a tonic and its wood as fuel.

Salai.

Salai, Boswellia thurifera, one of the frankincense trees, is common on all trap hills, and is easily known by its white scaly bark. The wood, which is full of resin, burns readily and is used for torches. The flowers and seed-nuts are eaten by the people, and the tree yields the gum olibanum.

Sarphali.

Sarphali, is common throughout the district on wooded hills and mountains. It seldom grows to be more than a bush. A gum called kavdi ud, obtained from the bark, is used as incense, and is said to possess stimulant and diaphoretic properties. It also forms a part of some ointments, and its wood is used as fuel. This tree is well suited for covering bare hills as small cuttings thrown on the dry soil strike root.

Savri.

Savri, the Silk-Cotton, Bombax malabaricum, is found chiefly in the west and central hills and uplands and on river banks. It is a large tree with a beautifully straight trunk, bright red flowers, and a soft down which makes excellent pillow stuffing. Its whitish wood though soft is close-grained and is said; to make good packing cases. It is also much used for water-channels and sword-scabbards. It yields a useful resin, the root' when boiled gives a gummy substance which is valued as a; tonic, and the bark is used as an emetic.

Shevga.

Shevga, Moringa pterygosperma, is found throughout the district in gardens and near villages. It bears pods which together with the leaves and flowers are eaten as vegetables. The seeds give a pure sweet oil which is valued by watch-makers as it does not freeze except at a very low temperature. The wood is soft and the bark is useful in medicine. A gum from cuts made in the trunk is used in rheumatism.

Shivan.

Shivan, Gmelina arborea, is a beautiful flowering tree. It is abundant in the western woods and is occasionally found in the east where vegetation is fairly plentiful. The wood, which is like teak, takes a good polish, and is used in house-building and for making wooden images and furniture. The fruit is a medicine.

Saundad or Shami.

Saundad or Shami, Prosopis spicegera, is largely found throughout the district on woody hills, plains, plantations, and tablelands; the tender fruit is used as a vegetable. The wood, which yields a gum, is hard, strong; and lasting, and is much used in making churning-staves or

ravis. According to the Mahabharat it was on the *shami* tree that the Pandavs stored their arms during their thirteen years' exile.

Sisu.

Sisu, Blackwood, Dalbergia latifolia, is scarce and of small size. It is occasionally found in the western and central hills. The timber,; which is heavy, strong, and fibrous, takes a fine polish and is one of the best of furniture woods. It springs readily from seed, but is of very slow growth. The tree flowers in March and April.

Siras.

Siras, Albizzia lebbek, is a good roadside tree and is found throughout the district. It is of rapid growth and takes well from cuttings. It yields a gum. The wood is a light reddish brown, with dark veins; it is not liable to crack. It is well fitted for wheel naves, and for pestles and mortars; the heartwood makes excellent charcoal.

Sitaphal.

Sitaphal, the Custard-Apple, Anona squamosa, grows readily on bare hill-sides, and in the cold weather yields a sweet and much valued fruit. It is common in gardens in the west and centre of the district and is grown in the same way as the guava. The tree is seldom more than fifteen feet high. The leaves have a fetid odour and when reduced to powder are used to kill lice on cattle.

Supari.

Supari, the Betel-Palm, Areca catechu, is found in some gardens, but the nuts sold in the Poona markets are imported. The nut is eaten with, betel-leaf and holds an important place in Hindu religious ceremonies. An extract made from the nut is used as catechu and the charcoal as tooth-powder. The wood, which is strong and lasting, is used as water-pipes.

Tad.

Tad, the palmyra-palm, Borassus flabelliformis, which thrives best near the coast, is scarce in Poona. The fibre of its leaves is strong and useful for house purposes.

Toran.

Toran, Syziphus rugosa, is a wild shrub which grows freely in the western hills. The fruit when ripe is eaten. The wood is hard, strong, and close-grained.

Tirti.

Tirti, Capparis rythocarpus, is a small tree which is common in the east. Its strong and porous wood is not used for any special purpose.

Tut.

Tut, the Mulberry, Morus indica is found in some gardens and near temples. There are many trees on the fort of Purandhar. Its fruit is used as a refrigerant and laxative and the roots to cure worms. The leaves are the favourite food of the silkworm. Three species are mentioned, the white and the red which grow to a considerable size, and a smaller variety called *chunchu tut*.

Tembhurni.

Tembhurni, Diospyros melanoxylon, is found throughout the district on wooded hills and in plain plantations. The wood is jet black, hard, and heavy and is well suited for ornamental work. The heartwood rubbed with water is used by Brahmans to mark their foreheads.

Tivas.

Tivas, Dalbergia oogeinensis, is fairly plentiful in the western and central hills. The wood is much valued being well suited for building and for making ploughs, wheels, and carriage poles.

Umbar.

Umbar, Ficus glomerata, is a large spreading tree common in the Sahyadri forests, and though often found in gardens and fields and near temples, is not a cultivated fruit tree. The leaves are usually covered with galls. The spittle produced by chewing umbar leaves mixed with cumin-seed or jira is considered excellent for inflamed eyes. The fruit, which is almost always full of flies, is eaten by the. poor. When unripe it is taken as a vegetable, and in seasons of scarcity, is mixed with flour and made into cakes. The wood not being liable to split, is well suited for panels and drums, and as it lasts under water it makes valuable well-frames. The tree yields much milky juice, which, together with the leaves bark and fruit, is used medicinally and

made into birdlime. The leaves are a good cattle and elephant fodder. The tree is considered sacred to the three-headed god Dattatraya who is supposed always to be present near its roots.

Vad.

Vad, the Banian tree, Ficus indica, is common both in the hilly west and in the eastern plains. As large cuttings when set in the ground grow readily, it is a favourite roadside tree. Its sap is sometimes used to reduce inflammation. The timber is of little value, and as the tree is held sacred by the Hindus it is seldom felled or turned to any use save for shelter and shade. The fruit is much eaten by birds but is said to be poisonous for horses. Its leaves are used as plates or patravalis. In 1837, at the village of Mhow in the Andhra valley, Colonel Sykes noticed a banian tree with sixty-eight stems, most of them thicker than a man's body; all except the parent stem were formed from airroots. With a vertical sun, it could shade 20,000 men. [Report of the British Association for 1837, 255.]

Varas.

Varas, Bignonia quadrilocularis, gives excellent wood for furniture and for planks and beams. It is fairly abundant in the central and western hills.

DOMESTIC ANIMALS.

[From materials supplied by Rao Saheb Nilkanth Bhagvant Mule, Mamlatdar, and Major G. Coussmaker.] The Domestic Animals of Poona are the same as those found in other parts of the Deccan. The pasturage is uncertain. In a few seasons it is abundant, in many it is scanty or precarious, and in times of drought it fails. When the grass fails the cattle have to be sent to distant pastures in the higher hills and large numbers perish. The 1876-77 famine reduced the number of all domestic animals, but the returns seem to show that the stock of horned cattle has nearly regained its former strength. [The following statement shows the returns of cattle and horses during the seven years ending 1881-82. These and other returns of animals cannot claim any great accuracy:

Poona Cattle and Horses, 1875-1882.

| YEAR. Bullocks. Cow | s. She- | He-buffaloes. | Horses. | Mares. |
|---------------------|---------|---------------|---------|--------|
|---------------------|---------|---------------|---------|--------|

| | | | | | buffa | aloes. | | | | |
|-------------|--------|--------|---------|------|---------------|---------|----------|---------------------------------|--------|------|
| 1875- 76 | 205,1 | 23 | 158 | ,988 | 50, | 148 | | 12,436 | 6589 | 5070 |
| 1876- 77 | 189,7 | 41 | 117,684 | | 39,338 | | | 9817 | 4706 | 3417 |
| 1877- 78 | 202,4 | 03 | 112 | ,444 | 39, | 9,509 | | 9716 | 4620 | 3452 |
| 1878- 79 | 202,8 | 23 | 115 | ,024 | 37, | 7,586 | | 10,184 | 4650 | 3633 |
| 1879- 80 | 210,0 | 027 12 | | ,918 | 36, | 634 | | 10,796 4228 | | 3803 |
| 1880- 81 | 213,7 | 95 | 130 | ,371 | 40,242 | | | 11,714 | 4166 | 3876 |
| 1881- 82 | 206,6 | 32 | 139 | ,793 | 41,055 | | | 12,068 | 5022 | 4196 |
| YEAR. | Colts. | As | CAC | | ep and oats. | | | Decrease compared with 1875-76. | | |
| 1875- 76 | 2406 | 7: | 137 273 | | 3,584 | 720,54 | 0 | | | |
| 1876- 77 | 1429 | 5! | 584 23 | | 3,266 | 604,98 | 2 | 115,558 | | |
| 1877- 78 | 1236 | 60 | 021 | 236 | 5,370 | 615,771 | | 104,769 | | |
| 1878- 79 | 1638 | 6: | 106 | 245 | 5,491 | 626,635 | | 93,905 | | |
| 1879- 80 | 1987 | 52 | 230 26: | | 1,847 | 656,470 | | 64,070 | | |
| 1880- 81 | 2177 | 6 | 770 242 | | 2,646 | 655,75 | 7 64,783 | | 64,783 | |
| 1881- 82 | 1774 | 69 | 936 285 | | 5,200 702,676 | | 6 | 17,864 | | |

The district has no class of professional cattle-breeders. But Kunbis who form the bulk of the husbandmen own large numbers of cattle, rear them with care, and sometimes deal in cattle. The 1881-82 returns show a total of about 200,000 oxen and 140,000 cows. Deccan cattle are hardy little animals, inferior in size and appearance to those of Gujarat. Of their breeds it is difficult to say anything definite. Few natives take intelligent notice of varieties of breed. They only recognize certain distinguishing marks or characteristics, the possession of which may be said to constitute a certain breed. They seldom take the trouble to keep the breeds pure or to improve them. They pay little attention to the animal's cleanness or comfort. Every village has its public grazing grounds, inferior waste lands free of Government assessment, the resort of almost all the village cattle. The mixing of the cattle in the grazing grounds does much to injure the breed and to spread disease.

Oxen and Cows.

Bullocks, returned at 206,632, and cows at 139,793, are, as far as has been ascertained, of ten kinds, Khilari, Malvi, Ghir, Dangi, Deshi, Arabi, Naghoris, Varhadi, Akulkhashi, and Hanams. Khilari cattle, called after the cattle-breeders of that name who are found in West Khandesh, are the most valuable draught animals in the Deccan. They are of good size, active, strong, and fairly teachable. They are a little slighter, but much resemble the famous Amrit Mahal breed of Hansur in Maisur. They have clean limbs, fine bones, sloping shoulders, round barrel, high hind quarters, and small hard and tough hoofs. One of the favourite breeding grounds of the Khilari cattle is the hilly country between Satara and Pandharpur whence they are generally brought. A pair of these bullocks will travel in a riding cart day after day at a steady pace of six miles an hour. The colour of the cows is almost always creamy white; of the bulls the same with reddish grey forequarters. The horns are long and upright, thin and irregularly curved in the case of the cows, and in the case of the balls handsome and massive, close together at the base, sloping back with a slight outward curve opening to a span of a foot, and ending in sharp and strong points. The ears are of medium size pointing backwards with the opening exposed; they rarely droop or turn upwards. Oxen of this breed cost £3 to £20 (Rs. 30 - 200) and cows £2 10s. to £9 (Rs. 25-90) each. Cows are seldom sold as the owners are unwilling to part with them, and when a promising calf is born allow it to drink the whole of its mother's milk. Malvi cattle come from the extensive grazing grounds of Malva, being brought by Vanjaris and Lamanis with whom they are great favourites. The Lamanis come from Khandesh

and Malva and sell cattle on credit, returning after harvest to receive payment. They go from village to village. The Lamanis are locally known as Hedes from hed a bullock. This word is applied to all Muhammadans and Hindus who deal in bullocks. Mr. J. O. Moore, C.S.1 The bullocks are good-tempered steady workers and teachable. The Malva breed includes two varieties, a short-horned and a long-horned. The short-horned Malva bullock differs greatly from the Khilari, being formed for steady plodding rather than for speed. They have a long, square, level frame, with short curved horns pointing forwards; the face is rather short and straight; the ears slightly bent and not very large; the colour white with a bluish grey above the fore-quarters of young animals and bulls. The cows are fine milkers. The long-horned variety is larger and more loosely made; its horns are turned upwards at the base, and then upwards and backwards, giving the animal a more stately appearance. The colour, as a rule, is darker, the grey being often spread over the whole body. As they are taller than the others, husbandmen generally put the long-horned Malvas next the plough, for the higher the plough yoke is lifted the deeper the share enters the earth. The cows are good milkers; even when more than eighteen years old, within a fortnight after calving, they give about twenty-two pints (11 Poona shers) of milk. Malva oxen cost £2 10s, to £10 (Rs.25-100), and Malva cows £2 to £7 10s. (Rs. 20-75).

The Ghir or Sorthi, that is the South Kathiawar breed, is noble and stately, but the specimens met in the Deccan are seldom the best of their kind and are probably of mixed blood, some from Kathiawar and others from Surat and Baroda. They are heavy and loosely made. They have a long stride and can draw very heavy and bulky loads, but their feet and hoofs are not suited to the stony Deccan and they soon become lame. They are also headstrong and difficult to turn. They are mostly used as pack animals and are much prized for the heavy work of garden cultivation. This breed varies much in colour, but its other characteristics are very marked: great height, a large massive head, short blunt curled horns, a round jutting forehead, large limpid eyes, and very long pendulous ears with a half twist so as to bring the opening in front. The cows are long of yielding profit, but after calving they give about twenty-five pints (12-13 shers) of good milk a day. The breed is imported by Lamanis. Sorthi oxen cost £5 to £30 (Rs. 50-300) and Sorthi cows £3 to £12 (Rs. 30-120). The Dangi, that is the Kolvan or North Thana breed, is common in the Akola sub-division of Ahmadnagar and presumably in similar localities along the Sahyadris. As they roam freely in large herds over the forest-clad hills, these cattle become hardy and indifferent to the weather. They feed on all sorts of fodder and thrive as well on rice straw as on millet stalks.

They are neither large nor well-made, are very ordinary workers, but useful and hardy. Their colour is marked, a dirty white with spots and blotches of black or dark-brown. They have small black horns, for the most part curly, but the curliness is not sufficiently marked to be taken as a characteristic of the breed. The cows, which are good milkers and well tempered, sell at £2 to £5 (Rs. 20-50). The bullocks generally fetch much the same price as the cows except in the more distant markets where their price varies from £4 to £15 (Rs. 40-150). The Deshi or local breed to which the largest number of cattle belong, is too mixed to be definitely described. They vary in every particular. The oxen, some of whom will work in the same team with well-bred oxen, cost £1 10s. to £9 (Rs. 15-90), and the cows, which when well fed clean and kindly treated yield ten to eighteen pints (5-9 shers) of milk a day, cost £1 to £5 (Rs. 10-50). The Arabi or Aden cattle are the best cattle in the district. They are small, between 3½ and four feet at the hip, gentle, and docile, moderate feeders, and good milkers. The colour is either white or grey gradually changing to blue grey or black on the fore and hind quarters with blacker points, and a white ring above the coronet of the hoof, or fawn-coloured deepening into a reddish brown more or less dappled. The horns are small and weak, often deficient; the hump is well developed; the eyes are large and full; the face short and straight, with a small square muzzle; the ears small erect or pricked forward, never hanging; the body square with a full dewlap; the skin fine and thin; the hair very short and smooth; and the tail thin and whip-like ending in a moderate tuft. The breed is attractive and the cows command £5 to £12 (Rs. 50-120). The bulls are strong, docile, and active, and can be used for draught and stud purposes. The cows come early into profit, and are most valuable for dairy purposes. [Lady', belonging to Major G. Coussmaker, had her second calf when 4½ years old and before the calf was four months old gave eleven Poona shere (22 pints) of milk daily. When the calf was a year old the mother was still giving about nine pints a day and did not dry for three months more. The heifer calf came into season when scarcely a year old. There are four other varieties, Naghoris of which an ox costs £5 to £12 10s. (Rs. 50-125) and a cow £2 to £6 (Rs. 20-60); Varhadis or Berar cattle of which an ox costs £5 to £10 (Rs.50-100) and a cow £2 to £G (Rs. 20-60); and Akulkhashis costing £5 to £12 10s. (Rs. 50-125). Finally there is the breed called Hanams which are brought from Nomad and the Mahadev hills south of Phaltan. They are generally used as cart-bullocks for which they are better suited than for the plough. They are rarely employed in carrying packs. As they sometimes fetch as much as £20 (Rs. 200) a pair few Kunbis can afford them.

Oxen are generally used in field-work, for drawing water from wells and carrying it in skin-bags or pakhals, for drawing carts, for pressing oilseed, and sometimes for riding. Except that barren cows are used by Vanjaris as pack-animals no cows are made to work. Working bullocks are fed with grass chaff, cotton-seed, oilcake, and sometimes millet ears, also with whatever green produce the husbandmen do not take to market, as the haulm of sweet potatoes and groundnut. When out of work the bullocks are sent with the cows to the village grazing lands under the charge of a cowherd or *gurakhi*. The cowherds are generally small boys and girls. They take the cattle to the pastureground between six and seven in the morning. They water them at some stream or pond thrice a day, in the morning, at midday, and in the evening. At midday they gather the cattle round them and sit under some tree playing the flute. In the afternoon the cowherds again take the cattle to the pasture-ground and bring them home in the evening. Though often very young, the cowherds, by the use of stones, sticks, and abuse, have their cattle completely under control and sometimes amuse themselves by riding on the backs of bullocks and she-buffaloes.] At night they get nothing to eat but grass. During the rains when there is no field-work some of the oxen are taken to the hills and left at large to graze. As regards the feeding of cows there is diversity both of opinion and of practice; but millet stalks, both Indian millet or *ivari* and spiked millet or *bajri*, are considered the best food. Kulthi, Dolichos biflorus, cotton-seed or sarki, and wheat bran, mixed with a little salt, increase the supply of milk; kulthi is sparingly given as it is apt to bring on abortion. Of the different kinds of oil-cake that produced from the earthnut is considered the best; linseed til Sesamum indicum is also valued, and khurasni Verbesina sativa and safflower are used, but their bitterness is apt to taste the milk. According to some authorities oil-cake of all kinds lessens the quantity of milk but increases the amount of butter and cream. Chuni, that is the husk and broken grain of tur pulse stewed in water, is a favourite food which keeps the cow quiet at milking time.' Three pounds of chuni, three pounds of cotton-seed, two pounds of oil-cake, twelve pounds of millet stalks, ten pounds of lucern or other green fodder, and two handfuls of wheat bran, and one handful of salt given in each of the three pails of drinking water, are a liberal allowance for a cow. Generally eight pounds of grain and twelve pounds of dry fodder are considered ample rations. When cows are kept only for milk, it is usual to milk three of the four teats, leaving the fourth for the calf. When it is meant to be reared for field-work or for other purposes the calf is allowed to drink the whole of the milk. The following items represent the coat to Europeans in Poona of keeping a cow in full milk. The daily allowance of food is about two pounds (one

Poona sher) of millet, tur bran or chuni, and cotton-seed; fifteen pounds of millet stalks; and five pounds of green grass or lucern. A little salt is mixed with the gram and some handfuls of bran with the water. At the following average rupee prices, cotton-seed sixty pounds, tur bran thirty-two, millet thirty-eight, millet stalks twentyeights bundles or about 160 pounds, and lucern about 170 pounds, the quantities mentioned above give for grain a monthly cost of about 9s. $4\frac{1}{2}d$. (Rs. $4\frac{1}{4}$) for millet stalks 6s. (Rs.3) for lucern 2s. (Rs. 1) and about 71/2d. (5 annas) for salt and bran, that is a total monthly cost of about 18s. (Rs. 9). In addition to the grains given to cows, a buffalo gets two pounds (1 sher) a day of oil-cake, twenty instead of fifteen pounds of *millet stalks*, and *ten* instead of *five pounds* of green grass. The monthly cost of a buffalo's keep maybe estimated at about £1 4s. (Rs. 12). Of this about 12s. (Rs. 6) are on grain and oilcake, 8s. (Rs. 4) on millet stalks, 3s. 6d. (Rs. 1¾) on lucern, and 7½d. (5 annas) on salt and bran. If fed in this way a country cow will give eight to twelve pints (4-6 Poona shers) a day, and a Kathiawar or Aden cow sixteen to twenty-two pints (8-11 shers). A buffalo gives fourteen to twenty-four pints (7-12 Poona shers) Oxen which are being prepared for sale or are extra fed to make them stronger and more useful in the field, are kept at home day and night and fed largely on ground or bruised pulse, groundnut, cotton seed, sesamum, fresh įvari stalks, bajri flour, and sometimes a small quantity of oil. Bullocks are guided by a string called *vesan* which is passed through the nose.

Cattle Disease.

The chief forms of cattle disease are *tiva* a disease of the stomach, *lal* a disease of the mouth, *sushi* a disease of the bowels, *khurkut* a disease of the hoofs, *dhendal* a fatal diarrhoea, and *phashi* a disease; of the tongue, flaw, caused by gas in the stomach after imprudent feeding, is easily cured by an aperient of hot linseed-oil, peppermint, and ginger or epsom salts. The Indian form of the foot and mouth disease is easily cured with cleanliness, carbolic acid, and careful feeding.

Except Ghirs or Sorthis, which live for more than thirty years, the age of a bullock or cow varies from twenty to twenty-five years. The bull has a sacred character as the carrier or *vahan* of Shiv. The cow also is sacred, but the bullock, except that his flesh is never eaten but by the lowest classes, is not treated with any special respect. Butchers who are all Musalmans kill cows and bullocks for the use of the non-Hindu population. Cattle which die from disease or accident become the property of the village servants, the Mhars and Mangs. They eat the

flesh and dispose of the hides to the tanners or Chambhars and of the bones to Musalman dealers who send them to Bombay for export to England or to the coffee plantations in Ceylon, where they are used in making manure. A bullock or cow with one horn turned up and the other turned down or akshapatal, a snorer or ghornara, a reeler or dulnara, and one with small white spots phulalela, are considered likely to cause loss or damage to the owner. Mangs castrate bullocks by applying butter to the testicles and rubbing and squeezing them for about half an hour between two smooth cylindrical rods called *musals*. After the operation the bullock is allowed to rest for about a fortnight during which he is well fed and cared for. In very many cases the bulls are not castrated before they are five or six years old, as by that time they are full grown and their humps and horns are well developed. In front of many temples of Shiv is a sitting stone image of *nandi* or the bull, the carrier of the god. In entering one of these temples a Hindu worshipper places his hand on the testicles of the bull and bows to the ling taking care to see the ling between the bull's horns. The cow is the most sacred of animals. Its five products or panch-gavya, urine, dung, milk, curds, and butter, are taken on the Shravani Day to purify the soul from sin. The *mantra*, or sacred verse repeated on the occasion is Yattvagasthigatam papam dehe tishthati mamake, prashanat panchagavyasya dahatyaguirivendhanam., that is, By the drinking of the five products of the cow the sin which has penetrated into my skin and bones is burnt, like fuel by fire. They are also drunk on the eleventh day after a death or birth by all the members of the family. A cow, or more correctly her nominal value which ranges from 6d. (4) annas) upwards, is given in charity to Brahmans. [Cow-gifts or gopradans are made to Brahmans on the occasion of an eclipse or of a death. The dying man or some near relation generally makes a cowgift to Brahmans. Of the four cows which are given to Brahmans after a death, one forms part of the ten prescribed charities or dasha danas; the second is called the *vaitarni* as she draws the dead man across the Vaitarna river in the lower world; the third is called papakshaya-dhenu or the sin-destroying cow; and the fourth is called moksha dhenu or the salvation-giving cow. When a man cannot give four cows he gives only one, the vaitarni. Besides these a male and a female calf called vatsa and tari, with a bell tied round the neck of each, are set loose at one of the funeral rites. The male calf is branded on the blade of the thigh bone with a red-hot three-pointed iron pike or *trishul*. Since the Cattle. Trespass Act has come into force these calves are given to Kunbis who take them to their fields. Every year on the last of Ashadh, Shravan, or Bhadrapad (July -September) Kunbis or Marathas keep a holiday called pola or the bull-feast, from pol a bull, in honour of their cattle. On the pola or bull day the bullocks are washed and

painted with red earth. Their horns are covered with tin-foil or begad, hemp tassels are tied to the horn tips, a necklace of bells is fastened round their necks, coloured clothes are thrown over their backs, and they are fed with malida, that is wheat or millet flour and molasses. In the evening all gather near the village office or *chavdi* and form a procession with music. The patil or some other rich villager takes the lead and the procession passes outside of the village gates. The day ends with a rich supper. People generally of the Trimali caste from the Karnatak teach bulls to dance and balance themselves on their masters' thigh and belly, and answer a few set questions by shaking their heads, recognizing and approaching a particularly dressed individual, and grunting in a peculiar manner. The owners get corn, money, and old clothes. The custom of keeping a sacred bull or pol free from work and fed by all is still kept in many villages. But as young bulls are seldom castrated till they are four or five years old and as till then they graze with the other cattle, the advantage of the village bull is to a great extent lost.

Buffaloes.

Buffaloes, returned at 53,123 in 1881-82, are common over the whole of the district. The cow-buffaloes (41,056) provide most of the milk. They are considered hardier and thrive on coarser food than; other cattle. Many male calves are allowed to perish, but especially in the western rice-fields some are used in the plough. They are of special value in the rainy season when the sun is not oppressive. A cowbuffalo is not made to work except when she gets fat and unmanageable. Eleven kinds of buffaloes are found in the district: Shindan or Sindh buffaloes, costing £2 to £20 (Rs. 20- 200); Kachhan or from Cutch, worth £3 to £20 (Rs. 30-200); jafari or from Jafarabad in Kathiawar, worth £5 to £20 (Rs. 50-200): Bhesri, worth £2 to £12 10s. (Its. 20-125); Surti or from Surat, worth £5 to £20 (Es. 50-200); Varhadi or from Berar, worth £2 to £12 10 (Rs. 20-125); Nemadi or from Nemad, worth £1 10. to £10 (Rs. 15-100); Gavthi or local, worth £110s. to £8 (Es. 15-80); Gavlan or Gavli worth £2 to £10 (Rs. 20-100); *Mahuri* or from Mahur, worth £1 10s to £7 10s. (Rs. 15-75); and Dhangari or Dhangar, worth £210s. to £10 (Rs. 25-100). The Gavlis or Dhangars are professional buffalo-breeders and earn their living by selling milk, curds, and fresh and clarified butter. In order to get a larger quantity of milk they often destroy the young calf as soon as it is born, taking care to prevent the mother seeing it by folding a piece of cloth round her eyes as otherwise she would not give her milk unless the calf was by her side. Most rich and middle-class people keep she-buffaloes for their milk. The male buffaloes (12,068) are in

such little esteem in the Deccan that few people keep them. When a male calf is born, it is either thrown away or taken to some distance and deserted, when it is killed by wild animals, dogs, or low-caste natives. Buffaloes are fed with grass, millet stalks or saram, and chaff. In the rainy season they are sent to graze in fields or on hill-sides. Cow-buffaloes, when in milk, before or at the time of milking, receive a mash of crushed pulse and oil-cake, cotton-seed, and rice bran. She buffaloes are almost always stall-fed and well cared for. A cowbuffaloe calves once every two years, and usually gives milk for a year after calving. Buffaloes cannot bear the heat of the sun and are very fond of water and shade. When not at work they are taken to a river; stream or pond, where they lie for hours all under water except their heads or even their noses. She-buffaloes are washed daily and are shaved once or twice a year. Buffaloes live from twenty to twenty-five years. He-buffaloes used in field-work are castrated either by stonebreakers or by husbandmen. As a rule it is only in working rice-fields that the buffalo is preferred to the bullock. That a he-buffalo may not got mischievous, or when his neck wants strengthening, a string or *vegan* is passed through his nose. To strengthen his neck he is tied by the head for a few hours every day. This is to prepare him for the yearly buffalo-fight on Dasara Day (September-October) in which the winner is the buffalo who forces the other back. A bull-buffalo is offered as a sacrifice to Devi or Durga in every Poona village on Dasara Day (September-October). The village headman cuts off the head if possible with a single stroke of his sword. The flesh of the sacrificed buffalo, as well as of buffaloes who die from sickness or accident, is eaten by Mhars and Mangs. The hides are used for making water-bags and buckets, and the horns which are useful for making glue are exported in large quantities. That fat and beautiful cattle may not suffer from the evil eye, a black thread with a cowry shell or a marking-nut, or sometimes an old shoe, is tied round its neck or leg.

Horses.

[The details regarding horses owe much to additions by Mr. W. Lamb, Superintendent Horse Breeding Operations.] Of Horses, mares, and foals, the 1881-82 returns showed a total of 10,992. The horse requires more care than any other domestic animal. The district has long been famous for its horses, and there are few villages in East Poona without one or two brood mares. Horses are used for riding, driving, and carrying loads. Eight breeds of horses are found in the district: Deshis, including Bhimthadis or Bhivarthadis that is of the valley of the Bhima, and Nirthadis that is of the valley of the Nira, cost £6 to £60 (Rs. 60-600) each; Kathiawadis cost £10 to £100 (Rs. 100-

1000); Iranis or Persians, £15 to £100 (Rs. 150-1000); Rangdas of North India with prominent noses, £10 to £50 (Rs. 100-500); Australians, wrongly called Cape horses, £30 to £.100 (Rs. 300-3000); Pahadis or Yabus, £10 to £100 (Rs.,100-1000); Pegus £20 to £100 (Rs. 200-1000); Arabs, including those imported from Arabia and the Deccan produce of Government stallions, £10 to £200 (Rs. 100-2000); and Charghoshas, literally four that is slit-eared, of which there are very few, about £50 (Rs. 500). The Persian char four and ghosha ear.] Of these the local or Deshi horses, which are bred on the banks of the Bhima and Nira, were most esteemed by the Marathas. They were of a middle size, strong, and rather handsome, generally dark bay with black legs. [As it does now to the Government Arab and English stallions the Bhimthadi or Deccan horse formerly owed much to foreign sires, to Arab and Persian horses brought by sea to the Konkan ports and to Turki horses brought by land from Upper India and Afghanistan. The import of horses probably dates from very early times. But there is no evidence that it was an important trade until the Muhammadan conquest of Upper India between the eleventh and thirteenth centuries. At the close of the thirteenth century Marco Polo notices that large numbers of horses were brought from Arabia and Persia into South India. The climate did not suit horses and the people did not know how to treat them; they lived only a few years (Yule's Marco Polo, II. 277-278). Shortly after Marco Polo's time (1297-1327) repeated inroads of Musalmans from the north showed the Hindu chiefs of the south that their only hope of success lay in improving their cavalry. From the middle of the fourteenth century, when the great Musalman dynasty of the Babmanis(1347-1520) was established at Kulburga in the Deccan and the great Hindu dynasty of the Vijayanagar kings was established (1330-1565) in the Karnatak, to secure a large supply of horses became one of the chief cares of the state. As during that time the Deccan was cut off from North India the bulk of the horses were brought by sea through the Konkan ports. In the sixteenth century the Portuguese found that their chief influence with Indian powers lay in their control over the import of horses. Scarcely a treaty with Gujarat, Ahmadnagar, or Vijayanagar is without a horse clause, the promise on the part of the Portuguese that horses shall be brought to their allies and shall be prevented from reaching the ports of their allies' rivals. Under the Marathas in the seventeenth and eighteenth centuries the import of horses through the Konkan continued. It was less important than formerly, apparently because communications with North India were open and easy and large numbers of horses came to the Deccan from the north. The Marathas also had learned how to breed and rear horses in the Deccan. Moor (Little's Detachment, 95), writing about 1790, says: The Marathas

certainly breed many horses and procure others from Arabia and Persia and from Kandahar and the northern parts of Hindustan.' The two chief breeds were the Arab and the Turki. The Turki was a heavy horse which would have crossed well with the Arab. But the Marathas objected to crossing breeds. They put Arab to Arab and Turki to Turki and thought that if the blood was kept pure the foal would have all the virtues of its parents. The Deccani ponies which Orme (Fragments, Note IV.) calls 'so diminutive and naughty that no one owns them,' Moor thought a most contemptible breed though not so despicable as Orme made them. They were serviceable and hardy and were often used instead of bullocks for carrying loads. They were worth 10s. to 30s. (Rs. 5-15). Horses of ordinary size bred in the country sold for £20 to £60 (Rs.200-600) and northern horses up to £100 (Rs. 1000) which was reckoned a high price. Horses were fed on gram and Kulthi, favourites sometimes being indulged with sheep's head broth, rice and milk, and other dainties. Their medicine for all forms of sickness was masala, spices mixed with flour and clarified butter. Except when they were vicious horses were seldom gelt. Their trappings were a bridle with one bit like a snafle, a horse-hair cloth with a leather girth and stirrups or a peaked saddle, and ornamented martin-gals and cruppers. At the sides of the horse tails of the white wild-cow were hung sometimes six a side; the mane was plaited in small braids with coloured silks and hanging silver knobs, and there was a necklace over the horse's chest of plates of silver or of silver coins. They carried with them the head and heel ropes and the leather feeding bag. The Marathas deserved to have the best horses, such care did they bestow on them. When dismounted a Maratha was always shampooing his horse, rubbing him violently with his elbows and wrists, and bending the animal's joints backwards and forwards. With this careful grooming a Maratha's horse on a pound and a half (1½ sher) of grain looked as well as a European's horse on four or five pounds. Little's Detachment, 89-90. Some details of the horse trade between A.D. 535 and 1567 are given in the Kanara Statistical Account, pp. 49-51. The Dhangar or Khilari pony deserves notice. He is thick-set, short-legged, and strong, very unlike the ordinary village pony though really of the same breed. The difference is chiefly due to early castration and the perfect liberty which in consequence it is possible to give them. Each family or tribe of wandering Dhangars keeps five to twenty or thirty ponies, most of them geldings and the rest mares. Most are bought from villagers but some are bred by the Dhangars. As they have no stallions their mares are generally covered by chance village ponies. The Dhangar ponies were the best of the thousands that in 1879-80 were sent from the Deccan as baggage carriers in the Afghan campaign. It is the fashion to say that the breed of valuable Deshi ponies is either

extinct or degraded. Still many first-class ponies can be seen on the mail cart line between Poona and Belgaum, and excellent pony hacks can often be bought in Poona. Although there are no professional breeders in the district, the headmen and other well-to-do villagers, especially in the eastern sub-divisions, keep mares both with the object of riding and breeding. The number of horses has doubtless diminished. This is generally attributed to the great drain on the stock of horses for service in the Persian campaign of 1856-57, the Abyssinian campaign of 1867-68, and the Afghan campaign of 1879-80. As only males were taken on those occasions the mares would soon have replenished the numbers if the regular demand was as great as formerly. The true explanation seems to be that the extension of made roads and railways and the great reduction in the mail cart service have combined to lower the demand and therefore to reduce the supply. Though the Marathas cling to the name Bhimthadi and will often maintain that a mare is of pure Bhimthadi breed, it is impossible to prove and difficult to believe in pure local descent. The fact that the best Bhimthadi mares are in many cases fifteen hands high raises a strong presumption of English or Arab blood. Government for many years maintained a large horse-breeding establishment at Aligaon on the Bhima. This was abolished about forty years ago; and in its stead at various central stations imported English and Arab stallions were posted for the free use of horse-breeders.

In recent years increased attention has been paid to the improvement of the Deccan breed of horses. About 1864 a yearly horse show was established at Sirur, and in 1872 a second show on a much larger scale was started at Poona. The number of Government stallions has been gradually increased as more and more work was found for them. In 1881 a separate department for horse breeding was organized. The prizes at Poona and Sirur shows vary from 10s. to £20 (Rs. 5-200), the aggregate amount spent being £60 (Rs. 600) at Sirur, and £600 (Rs. 6000) at Poona. These shows and the use of the Government stallions have greatly improved the breed of Poona horses. The present establishment of Government stallions in the Poona district is nine horses and six ponies. They are posted, six at Sirur, four at Supa, three at Baramati, and two at Indapur. Three of the horses are English; the rest are Arabs. Most of the colts are sold as yearlings, the majority finding their way to the yearly fair at Malegaon in the Nizam's territory. Some fillies are also sold at the Malegaon fair; but most are kept by the breeders to be used as brood mares. At Malegaon the vearlings fetch £5 to £20 (Rs. 50-200). They are bought chiefly by a tribe called Hatkars who live in the neighbouring villages. They feed these young animals well for a year or two and bring them again to

the fair, where they are sold, as two three and four year olds at £15 to £70 (Rs. 150-700). The chief purchasers are dealers from Haidarabad and officers from native cavalry regiments. Yearlings are sold because the breeders are generally too poor to meet the cost of bringing them to maturity, and colts are sold in preference to fillies because, not being castrated, they become very troublesome. One of the chief objects of the new horse-breeding department is to introduce the practice of castrating colts, for which purpose skilled operators are provided by Government who perform without fee or charge. When the practice becomes general it is hoped that breeders will keep their colts and that many remounts may pass into the army direct from the breeders.

After they are a year old colts are fed with hariali Cynoden dactylon, lucern, and pond grass, millet straw or kadbi, wheat husk gram, maize, math Phaseolus aconitifolius, and millet flour. Weak and thin animals are given fresh and clarified butter, sugar, the flesh of a goat or sheep, eggs, and gram and young millet plants *Phadi*, a preparation of wheat flour and molasses boiled in water and made into balls, is also sometimes given. Small ponies, which are generally used for carrying loads, are hobbled and allowed to graze alter the crops are removed. In Bhimthadi, horses are sometimes let loose in fields with standing *jvari*, a treatment which soon strengthens and fattens them. Oilcake is sometimes given as a tonic, but the people dislike it as they believe it affects a horse's speed and makes it more difficult for him to recover from a broken joint or bone. Horses are not generally broken to the saddle before they are two years old though they sometimes begin work at eighteen months. They are shod once every one or two months. The people are very fond, of having gaily dressed horses led in their marriage and other processions. The chief forms of horse disease are: palkida, believed to be strangles; shemba or sina, glanders in its worst stage, a disease of the head produced from cold; chandani or tetanus, producing shivering of the body; ghatsarp or throat-snake, laryngitis, which affects the inside of the throat so that the animal cannot eat or drink and generally dies. The cure for this disease is to make the horse inhale the smoke of the middle part of the kevda Pandanus odoratissimus flower for three days or swallow pills of the ashes of snake's slough mixed with honey. *Thasi*, probably glossitis, is a disease of the mouth, which swells and blackens the lower part of the tongue, Munga or lampass is a disease of the upper lip. Pashan canker in the feet and bhenda which is a grease in the heels, or in its worst form grapes, are diseases of the leg. Kurkuri or colic, including enteritis or inflammation of the intestines, produces pain in the stomach and generally proves fatal. Fever and a disease

called *chakraval* or ring-bone, though not fatal, makes the animal incurably lame. *Barsati, haddibadi,* and *berhadi* are also diseases to which horses are subject. *Zhairbadi* and *Indiana* or anthrax fever though not common is known in Poona, and is very fatal. Horses feet if allowed to remain damp or badly cleaned are apt to breed worms. The Poona district is very healthy for horses who live twenty to thirty years. On *Dasara* Day in September-October horses are washed and decked with flowers and ornaments, and a beautiful cloth or silk cover is thrown across their backs. They are worshipped, have a new saddle set on their backs, and are ridden in procession to the sound of drums.

Seventy-two peculiarities in a horse are considered unlucky for his owner. The chief of these are: *utarand* or three rings of hair on the forehead one above the other; *basing* or three rings of hair forming three angles, on the forehead; *chimata* or two rings of hair in a line on the forehead; *asudhal* (*ashrudhal*) or watering of the eyes; *bhoda* rings of hair near the corners of the eye; *kridaval* or a ring of hair on the breast; and *gom* which is of different kinds is a line of hair on the neck or chest. A horse which remains quiet in the stable, is called *khunte-gad* or fastened to the peg and is considered lucky, while a restive horse called *khunte-upat* or peg-lifting is considered unlucky. Each of these unlucky marks has a *jabab* or counterbalancing good mark. The knowledge of and the belief in these bad and good signs is said of late years to have greatly declined.

Asses.

Of Asses the 1881-82 returns showed a total of 6936. The asses are used by Beldars and Vadars both of whom are stonecutters, and by Lonaris or lime-burners, Kumbhars or potters, and Parits or washermen, for carrying loads and sometimes for riding. [Riding an ass is considered a disgrace by the higher classes, and was formerly a punishments. Delinquents were paraded through the town seated on an ass's back, people may still be seen riding on asses with their face tail-wards in some parts of the districts as part of the merry-making in the Shimga holidays in March -April, They are also used to carry bricks and sand, grain and road sweepings. Asses are of two kinds, country or Deshalu, costing £1 to £6 (Rs. 10-60), and Arab, Persian, and Italian asses, costing £80 to £60 (Rs. 800-600) which have been imported by Government for use as stallions for mule-breeding. The country ass is small and generally frightfully cowhocked, but they are as hardy, enduring, and easily fed as any of their race. They are generally bred by the wandering tribe of Kolhatis. In the country they are seldom groomed and are let loose to graze and pick up their food

near village dunghills. In towns they are fed with grass, millet stalks or saram, and rice-husk, and sometimes with grain and gram. The ends of the nostrils, generally the false nostrils, are sometimes slit half-way across to enable the animal to breathe freely when heavily leaden. The ass is careful to drink only pure water. If it cannot get clean water it will remain without drinking for two or three days at a time. Asses suffer from kurkuri a disease of the abdomen, and raska a cough. They live twenty to twenty-five years. Ass's milk is used as a medicine for children and as a tonic. The urine is drunk by persons suffering from venereal diseases and the dung is used as a poultice and in cases of dysentery and fever. On the first of Kartik (October-November) asses are washed, decorated, and feasted.

Mules.

Mules are proverbially strong and are used by Lonaris. charcoal-burners, in carrying loads and in drawing carts. None of these mules are bred in the district. They are either cast from the Commissariat Department or they were sold at the end of the Abyssinian campaign. With the object of introducing the practice of mule-breeding Government have posted two donkey stallions at Sirur for the free use of those who will bring pony mares to them. Prizes are given for the mares so covered and for young mules at the Poona and Sirur horse shows. The people are averse from the practice and take to it very slowly.

Sheep.

Of Sheep and Goats, the 1881-82 returns showed 285,200. Large flocks of sheep are found in all good sized villages and goats are common everywhere. The city of Poona offers a ready market for as many sheep as the district can produce. Sheep brokers and mutton butchers come regularly from Bombay and buy goats, kids, sheep, and lambs, paying 2s. to 8s. (Rs. 1-4) a head. There are two kinds of sheep, country or desalu costing 2s. to £1 (Rs.1-10) and dumba (from dum a tail) long broad-tailed sheep, costing 8s. to £2 10s. (Rs.4-25). The long-tailed sheep include three varieties: Yaipuri, long-tailed and white with a black patch or two; Kabuli, broad-tailed, short-legged, and white or white and black; and Yelga from the Bombay Karnatak, tall, broad-tailed, and of many colours. In many Poona and Ahmadnagar villages it is the exception to find sheep the property of a Dhangar or an individual of the shepherd caste, and the keeping of a flock of breeding ewes is not usual except among well-to-do Kunbis. Every Kunbi who tills garden land tries to have his own flock of sheep.

and most villages have three or four husbandmen with flocks of their own. Sheep for stock are bought by the score, the price varying from £1 16s. to £6 (Rs.18-60). The price is sometimes as high as £8 (Rs.80) when the buyer chooses each sheep picking one ram and nineteen ewes all between three and four years old and of good colour. A favourite custom among Kunbis is to buy an old ewe with her sixth lamb, kill the mother as soon as the lamb can shift for itself, and bring up the young one as a pet for the children. The pet is kept till it begins to be troublesome when it either follows its mother or is sold to a broker. Ewes go with lamb five months, and though known to year in every season of the year, November and June are the favourite times. It is not known how long a ewe will go on bearing. The Dhangars think it advisable to sell them after they have had five lambs. The age of the mother when the first lamb is born varies from 400 to 600 days, and the intervals at which the lambs are dropped vary from six to 14½ months. As a rule only one lamb is yeaned at a birth, a couple being a very rare occurrence. Male lambs are castrated and sold when a year and a half old to butchers or other dealers. A ewe or ram till it is shorn is called saoli, and after it is shorn a ram is called balinga and a ewe is called sakore. A castrated sheep or wether is called varip. Forty per cent are castrated between the age of six and twelve months, never before six and never after twelve. The object of castration is to make them fat. A two or three year old wether fetches 13s. (Rs. 61/2), an ordinary sheep 6s. to 7s. (Rs. 3-3½), and a lamb 3s. (Rs. 1½). Unless well fattened the ordinary Deccan sheep does not become very heavy. After they are six months old they may be killed weighing when clean twenty pounds, and rarely more than thirty pounds. As the feeding of sheep is neglected, and as they are not sheltered against rain or sun, the Deccan sheep seldom lives more than seven years. If looked after and cared for the might live three years longer. If the flock is large, Kunbis generally engage a Dhangar or a man of any other labouring caste to tend them, paying him £2 10s. (Rs. 25) a year, besides food and clothing. The surplus milk of the ewes is also his. In the early morning sheep are driven in flocks of 100 or 120 to the grazing land where they nibble grass and eat fresh babhul leaves and pods. If shelters from the midday sun and from rain they thrive better, have more wool and milk, and are more useful. At the end of the hot season, when food is scarce and water is bad, the sheep fall into very poor condition and the June lamb's are very weakly. The rank vegetation which in their half-starved state they greedily devour brings on scouring and many die from that disease, or from the fly which is very virulent during the rainy season. In the evening the sheep are brought back and shut in their folds, which are generally surrounded by a hedge thick enough to keep out wolves but giving no protection

against wind and rain. Great numbers of lambs and half-grown sheep are carried off by wolves, who, where the grass and the crops are long, are very bold catching stragglers both by day and night. One or two wolves haunt most villages. The shepherd has a large dog and while out keeps his sheep constantly moving for fear of the wolf who is generally hid behind a big stone or bush or in the long grass watching for the chance of picking off a lamb. The rams generally remain in the flocks and miscarriages are not uncommon. Old rams get very ill-tempered and without any provocation attack and knock down the other sheep.

The dung and urine of sheep are so valued as manure that owners of flocks are engaged to graze their sheep in fields for two or three nights. The Dhangars usually wander from village to village in a regular yearly circuit in the plains during the rains and cold weather and in the west during the hot months. They are paid by the husbandmen to fold their sheep in their fields. In some places they only get their food. In others where gardens abound as much as 1s. or 2s. (8 annas or Re. 1) is paid for one night for a hundred sheep. Sheep's blood is given to horses to drink and is rubbed on their chests when they are exhausted.

Sheep are sheared twice a year in Ashadh or June-July and in Kartik or October-November. Each sheep on an average gives one pound of wool at each shearing worth 4½d. to 6d. (3-4 as.). The loss in carding, spinning, and weaving amounts to twenty-five per cent. Sometimes Dhangars are called to shear the sheep and are paid at the rate of 4s. (Rs. 2) the hundred. The wool is bought by the Dhangars whose women card it by means of a bamboo bowstring with gut twist, and spin it either fine with the help of the ordinary spinning wheel or coarse using the spindle. The threads are stiffened with a paste of tamarind stones pounded in the rough stone mortars which are generally to be seen outside of Dhangars' houses. The paste is applied with a large stiff brush. After the warp-threads have been placed and stretched the Dhangar takes two days to weave a blanket about eight feet long and 2½ feet wide, the price of which varies from 2s. to 10s. (Rs. 1-5) according to the colour and fineness of the texture. White blankets and seats or a asans used while performing religious ceremonies, have a special value, being considered more sacred.

Goats.

Goats costing 8s. to £1 4s. (Rs. 4-12). belong to four classes: khuri, ghodsheli, koi or surti, and savti. The khuri are Karnatak goats; they

are small and have short ears. The *ghodsheli*, said to come from ghoda horse and sheli a-she-goat, is a large goat. The koi or surti goats give the largest supply of milk and are kept and fed at home; their flesh is said to be hard and coarse. The savti goats are taller and larger but give less milk. They are sent into the forests: to graze. Their flesh is said to be tender and they are generally kept for food. There are no special goat-breeders. Dhangars, Kunbis, and; Musalmans are the classes who own the largest number, and Brahmans and other high-caste Hindus have sometimes a she-goat or two in their houses. Goats are tended in the same way as sheep. They eat the fresh leaves of trees and shrubs but are fed at night with jvari stalks, tur and gram, shevri limb and karvand leaves, and babhul leaves and pods. Dhangars keep their goats with their sheep in the field at night. A she-goat bears every ten months and each time gives birth to two or more kids. Her daily yield of milk varies from half a pint to eight pints (¼-4 shers). Goat's milk is used as a tonic for children and is sometimes made into butter. The flesh both of sheep and goats is eaten by all classes except Brahmans and Gujarat Vanis. Goats suffer from the same diseases as sheep and live five to ten years. The sheep and the goat are offered as sacrifices to village gods and demons. The blood of the offered animal is spilt over the idol and the flesh is cooked and shared among the worshippers and the members of the village community.

Elephants and Camels.

Elephants and Camels were common in Poona when it was the capital of the Peshwas, Camels used to be bred in the Man and Malsiras subdivisions of Satara and Sholapur. At present the number of both is small. Those that remain belong either to the Commissariat Department or to petty chiefs.

Dogs and Cats.

Except in cantonments' the Dog and Cat are often without owners and neglected. The only sporting dogs are greyhounds of two breeds *lut* and *paligar*. The *lut* is most esteemed, but both are rare and still more rarely pure bred.

Fowls.

Cocks and hens are the only poultry reared in the country parts of the district, though turkeys, geese, and ducks are found in large towns. Domestic fowls are more often kept by Musalmans and Mhars, Mangs, and Dhangars than by Kunbis. They are of three kinds: the common

fowl like to but much smaller than the English barn door fowl, known as savli, quiai, or teni; the Pegu, asil or surati and the Malay of English poultry books, called by Europeans kalam [The word kalam seems as in the case of the *kalam* crane, Anthropoides virgo, to be a corruption of the Persian sulang that is big fowl. Mr. Fazl Lutfullah. very much larger than the ordinary fowl and laying larger better and more costly eggs. Among fowls is occasionally found an *uphratya parachi* or fowl with ruffled feathers, the Frizzled Fowl of English poultry books. [Though this frizzle is a sport or freak of nature rather than a distinct breeds judicious mating would perpetuate the characteristic. It is an ordinary-sized fowl of all colours, with many feathers curled away from, instead of towards, the body some feathers having no web, only the naked shaft. Major Coussmaker. A cock costs 2s, to 10s, (Rs.1-5);a hen 1s. to £1 4s. (8 as.-Rs. 12); a half fowl 6d. to 1s. (4-8 as.) and a chicken $2\frac{1}{4}d$. to $4\frac{1}{2}d$. ($1\frac{1}{2}-3$ as.). They are left to pick what they can find near their owner's house, chiefly worms and insects. They are also sometimes fed with corn and bread. The flesh and eggs are eaten by almost all classes except Brahmans and Gujarat Vanis. Hens lay for about six weeks ten or twenty eggs and then stop. Hens are very capricious in their laying; those that have no inclination to sit, unless they get fat, stop every few days and begin to lay again, whereas those that are determined to sit or are very fat only lay a few eggs and then stop for a month or more. Eggs are useful in preparing fireworks. The chief diseases to which domestic fowls are subject are manmodi or the neck-breaker, hopa a fatal kind of piles, and roup which first shows itself by running from the nostrils and eyes, an accumulation of saliva in the mouth, eruptions on the head, and diphtheric ulcerations in the mouth and throat like a yellowish white fungus. Fowls also suffer from disease of the liver and inflammation of the bowels. It is difficult to define the symptoms of the two last diseases; sluggishness, indigested food in the crop, great thirst, want of appetite, leg weakness, and a yellow tint in the bare skin of the head and face, are all more or less apparent. Fowls live three or four years. Hens and chickens are offered as sacrifices to village gods and spirits and are waved round the head to remove sickness and the influence of the evil eye, either when a man is overtaken by calamity, or in consequence of vows made, when enterprizes are undertaken, or male children are born. As a rule the birds which are sacrificed are eaten by the persons who offer them.

Pigeons.

Many Musalmans and a few Hindus breed Pigeons for amusement. They are of four kinds: *lakhia*, *lotan*, and *girrebaj*, all costing 1s. to 2s.

(as.8-Re. 1) a head, and sadhe or common, costing 6d. to 1s. (4-8 an,). Pigeons take so little room, breed so persistently, and are so easily kept that every town has its three or four families of pigeonfanciers who constantly play with their birds, and teach them tricks which after a few years become characteristics of certain breeds. They are generally fed with bajri, kardi, wheat, peas, and other grain, and, when in want of fattening, with bread, sugar, butter, and flesh. These are spread in the quadrangle of a house where the pigeons are let loose. Pigeons are kept in small cots either in walls or on wooden stands. They are made to fly between ten and eleven in the morning and between five and six in the evening. They rise from two hundred to five hundred feet in the air and return to their cots at the sound of a whistle. Pigeons sometimes leave their homes and do not return for six months at a time. Small silver or brass ornaments, called painjans, are sometimes tied round their feet. They live for twenty years and are subject to two chief diseases: suka in which a sticky master passes from the mouth, and tukhama an outbreak of small tumours. Pigeons are eaten by some classes of Hindus and by Musalmans and Europeans.

WILD ANIMALS.

WILD ANIMALS. [Contributed by Mr. A. Keyser, C. S.] The spread of tillage and the increase in population constantly reduce the number of Wild Animals, The Tiger, Vagh, Felis tigris; the Panther, bibla, Felis pardus; the Leopard, chitta, Felis jubata; and the Bear, asval, Ursus labiatus, are found only in the Sahyadris, and even there in very small numbers. The bear is sometimes tamed and taught to dance by men of the wandering tribe of Musalman Darveshis, who lead their bear from door to door and ask for alms. A few hairs from a bear's back are kept in lockets and hung from the necks of children to guard them against the evil eye. Children are also for the same reason made to ride on bears' backs. During the eight years ending 1882 four human beings and 175 cattle were killed by tigers, and fifteen tigers and sixty-eight panthers were slain, for which rewards were given by Government. The details are: 1875, two tigers and nine panthers; 1876, one tiger and six panthers; 1877, one tiger and seven panthers; 1878, tight tigers and five panthers 1879, two tigers and six panthers; 1880, six panthers; 1881, sixteen panthers; and 1882, one tiger and thirteen panthers. Of the Deer tribe, the Stag, sambar, Rusa aristotelis; and the Spotted Deer, chital, Axis maculatus, are rare, but are still found in the Sahyadris. The Bison, gava, Gavaeus gaurus, is found in the Sahyadris but is also very rare. The Wolf, landga, Canis pallipes, although not common, occurs over the whole district and

causes much loss of sheep and goats. In 1877, 110, in 1879, 584, in 1880, 370, and in 1882, 265 sheep and goats were registered as killed by wolves, and twenty-four wolves were slain between 1877 and 1882. The Hyaena, *taras*, Hyaena striata, is also found in the hills and occasionally in the interior of the district.

Other game animals, which though not numerous are found in various parts of the district, are, the Boar, randukkar, Sus indicus, whose favourite haunts are the babhul groves that abound close to the Bhima and Ghod rivers and also in the hill forests in the west. In the neighbourhood of Poona, since the opening of the Mutha canals (1873), there has been a very large increase of wild pig. The people complain loudly of their ravages. They come down in the evening from the Sinhgad range, and, after eating sugarcane and earthnuts, either return to the hills early in the morning or remain in the cane. The cultivation of earthnuts has been discontinued in the neighbourhood of Poona owing to the ravages of these animals. The Antelope, kalvit, Antelope bezoartica, and the Indian Gazelle, chinkara, Gazella benettii, are chiefly found in the hills, and a third variety of small deer, the Hog-deer, Axis porcenus, occasionally falls to the shot of an unusually fortunate sportsman in the Sahyadris. The animals which abound all over the Presidency and which require no special mention are the Jungle Cat, ranmanjar, Felis chaus; the Jackal, kolha, Canis aureus; the Fox, khokad, Vulpes bengalensis, which has its home chiefly in the rocky hills and ravines abounding all over the district; the Ichneumon, mungus, Herpestes grisseus; the Bandicoot rat, ghus, Moesa bandicota; and the Grey and Bed Squirrels, khar, Sciurus palmarum. The S. Elphinstone is occasionally seen.

Game Birds.

GAME BIRDS. [Contributed by Mr. A. Keyser, C. S.] The district is poorly supplied with Game Birds. Of Quail, the Grey Quail, Coturnix communis, is found over most of the district between November and March, and the Bustard Quail, Turnix taigoor, also an immigrant. The Rain or Black-breasted Quail, Coturnix coromandelica, and the smaller variety which can hardly be considered a game bird, the Rock Bush Quail, Perdicula argoondah, are natives of the district and are found all the year round. The Bustard, Eupodotis edwardsi, is very rare and so is the Florican, Sypheotides amrita, but both are occasionally shot. Duck and Snipe are found in the various rivers and artificial lakes and ponds during the cold months. The common Grey Partridge, Ortygornis ponticeriana, abounds, and both the Black, Francolinus vulgaris, and the Painted, Francolinus pictus, are to be found. The Rock Grouse,

pakurdi, abounds on the low stony hill ridges with which the district is full. Pea Fowl, Pavo cristatus, Grey Juggle Fowl, Gallus sonnerati, and Spur Fowl, Galloperdix spadiceus, inhabit the forests in the west. Halftame pea-fowl are found near many villages, as the people look on them as sacred. The Green Pigeon, Crocopus chlorigaster, is rare, but the Blue Pigeon, Columba intermedia, is found in flocks in nearly every well. Except of quail, and on rare occasions of duck and snipe, no large bags are made in the distinct, and even good quail shooting is not to be had every year.

SNAKES

[Contributed by Mr. G. W. Vidal, C. S.] Snakes are numerous throughout the district, particularly in and about the cantonment of Poona. All except three kinds, of which one is rare and another is doubtful, are harmless. The Cobra in fact is the only venomous species which need be taken into account. The small Viper or *phursa*, Echis carinata, which is so plentiful and so destructive in the narrow strip of littoral between the Sahyadris and the sea creeps up to the summit of the Sahyadri range, but is not common in any other locality in the Poona district. A few stragglers may be found in the plains to the east of the range, but they are rare. The Large Chain Viper, *ghonas*, Daboia russellii, which occurs very sparingly in the Konkan, may also be expected in the Sahyadri range; but there appears to be no authentic record of its occurrence. The Hamadryad, the Banded Bungarus, the Krait, and the Green Tree Vipers are equally unknown.

As might be expected the mortality from snake bite in the Poona district is insignificant, and for the past five years has shown a satisfactory decrease. In 1876, twenty-four deaths were attributed to this cause; in 1877, twelve; in 1878, nine; in 1879, five; and in 1880 only four. This comparatively low rate is, no doubt, due to a great extent to the scarcity of the Echis, which is the chief agent of destruction in Western India generally. The bite of the Cobra, although far more dangerous, is more easily avoided. On the other hand the Echis, though it may only cause death once in five times, finds many more opportunities of biting, from its small size, its fierceness, and its perverse reluctance to move out of the way to avoid being trodden on. This conclusion is amply borne out by the annual returns of mortality from snake bite for the Bombay Presidency; for in the tracts where the Echis is especially abundant, in Sind, Ratnagiri, and Thana, the mortality is greatly in excess of that of all the other districts put together.

The harmless snakes are numerous, though the umber of species represented is not large. Besides the Chequered Water Snake, panadivad, Tropidonotus quincunciatus, which is abundant throughout the well-watered tracts, the species most commonly seen in and about Poona are the Thickbodied parad, Gongylophis conicus, and the Grassgreen Ground Snake, Tropidonotus plumbicolor, the young broods of which make their appearance in the rainy season. Both these species are commonly supposed by Europeans and natives alike to be venomous. In the more rural parts the commonest species is perhaps the Indian Rat Snake, dhaman, Ptyas mucosus.

The following is a list of the various species which are known to occur. The list, except in the case of one species [See note 1 at foot of page 76,] which is entered on the authority of Mr. W. Theobald as occurring in Poona, has been compiled exclusively from specimens obtained and procured by the writer. For the descriptions, which have been given in as popular a form as possible, the writer is greatly indebted to the works of Dr. Gunther and Mr. Theobald. The following books are referred to in the list: Russell's Indian Serpents; Gunther's Reptiles of British India; Theobald's Descriptive Catalogue of the Reptiles of British India; Fairbank's Bombay Reptiles published for the Bombay Gazetteer; and Destruction of Life by Snakes and Hydrophobia, in Western India, by Ex-Commissioner. The classification follows that adopted by Dr. Gunther and Mr. Theobald. The writer is also much indebted to Dr. Nicholson for much information contained in his work on Indian Snakes.

Typhlophidae.

The family of Typhlophidae, the so-called Blind Snakes with rudimentary eyes, is represented by the Typhlops braminus (Daud) This little burrowing reptile, whose head without a magnifying glass is with difficulty distinguished from its tail, bears a strong superficial resemblance to a common earth worm, and is probably frequently passed by as an earth worm. It is not often seen above ground, except after a shower of rain. It belongs to the lowest type of snake, and is also perhaps the smallest of the Ophidia, its maximum length being only eight inches. It is held in needless dread by natives. According to Dr. Russell, the father of Indian herpetology, the Blind Snake progresses either end foremost, but this peculiarity has not been noticed by later writers.

A very closely allied species of slenderer form, the Typhlops pammeces or tenuis of Gunther, is included in Dr. Fairbank's list of Bombay

Reptiles, as also is another species of the same group, the sharpnosed Onycephalus acutus (Dumeril et Bibron), whose occurrence in the Deccan has been noted by Dr. Gunther. The latter will probably be found in this district, but the occurrence of the former which is a Ceylonese species seems doubtful.

Uropeltidae.

The Short Tails, Tortricidae, with rudimentary hind limbs, and the Xenopeltids without limbs, are not represented in this district Of Rough Tails, Uropeltidae, at least two species have been found, Silybura macrolepis (Peters), which is distinguished from its many congeners by having fifteen instead of seventeen scales in a row, has been obtained on one occasion, but is very rare. This Rough Tails is black with very bright steel-blue reflections when fresh. Each hexagonal scale is margined with waxy white, giving the skin honeycombed appearance, while a broad bright yellow zigzag band runs along each side from mouth to neck, succeeded by a few broken spots of the same colour. A similar yellow band adorn each side of the tail below. The latter appendage, as in all the makes of this group, is abnormally short. It looks as if it had been severed obliquely like the joint of a fishing-rod and then scraped with a rasp. The caudal disk acquires this rough appearance from a double row of keels thrown out from each scale. At the extremity of the tail, as if the cut had left jagged edge, are a pair of minute horny spines. The scales of the body are smooth. The Rough Tail Snakes are seldom seen above ground, but are occasionally exposed is making deep cuttings for roads. That they labour hard in making their burrows is shown by the fact that specimens of this family are sometimes found with the head displaced from its direct axis, 'as though' writes Theobald ' it had been dislocated during some effort of the snake to penetrate the soil.' The head in all these Rough Tails is smaller than, and not distinct from, the neck, S. macrolepis grows to about ten inches in length, the tail being less than half an inch. Like all other snakes with thick tails, this species is called *dutondi* by the natives.

An allied species, Silybura bicatenata (Gunther), has been obtained in excavations made at the Amba Pass between Ratnagiri and Kolhapur, and occurs also within the limits of the Poona district. S. macrolepis is not included in Dr. Fairbank's List of Bombay Reptiles, but a third species of Rough Tail, S. elliotti (Gray), which is said by Theobald to inhabit Madras and the Deccan, is entered. S. elliotti, which may be distinguished by the yellow band which completely encircles the tail,

has not yet been recorded from the. Poona district, and does not probably extend so far north.

Calamaridae.

The Dwarf Snakes, Calamaridae, of diminutive size and found chiefly in the East Indian Archipelago and the Malayan peninsula, do not occur in the Deccan districts, though one species of the genus Geophis is found near Madras.

Oligodontidae.

The prettily marked Short Tooths or Filleted Ground Snakes, comprising the genera Oligodon and Simotes, are represented by Gunther's Oligodon fasciatus. This species is distinguished by having a irregular series of brown dots on the ventral shields, seven upper labial shields, and scales in rows of fifteen. The markings on the head are symmetrical, but less distinct than in other species of the same genus. The back is adorned by a series of brown black-edged cross bands. It grows to fourteen inches in length. Other representatives of this family, both of the genus Simotes as well as Oligodon, probably occur. but have not as yet been satisfactorily discriminated. Dr. Fairbank includes in his List of Bombay Reptiles the Pretty Short Tooth, Simotes venusta (Jerdon). Another species, Simotes russellii (Daud), has also been found in Ratnagiri, though omitted from Dr. Fairbank's list. The Short Tooths are active little reptiles, and the conspicuous V-markings on their heads often cause them to be mistaken for Vipers by the casual observer. They are, as might be expected, thought highly venomous by the natives, and a specimen Oligodon fasciatus was once gravely presented to the writer by a conjuror and snake-charmer as the young of the Chain Viper, Daboia elegans. In the Konkan, the Short Tooths are generally known as bachcha nags or young cobras. It is probable also that the tradition handed down by the Portuguese of a diminutive snake to which they gave the name of Cobra de Morte, from the supposed deadly nature of its poison, had its origin in the dread in which these innocent Short Tooths were once popularly held. Possibly the belief in such a small but poisonous species was strengthened by Cuvier's description in his Regne Animal of a 'petite vipere.' Dr. Russell also may have furthered this belief by recording several cases where natives had died from the bites of diminutive but unrecognized; snakes. Two sepoys in Captain Gowdie's battalion at Rajamahendri were bitten in the night by the same snake, which was described as being' scarcely six inches long, about the size of a large goose-guill, of a dark straw colour, a flat head with two very small

eyes which shone like diamonds, and behind each eye was a black streak about three fourths of an inch long.' The first man bitten died after six hours, and the second, who was bitten within a minute after the first, died within eleven hours. Neither man suffered visible pain or convulsions, but passed away in a kind of stupor Similarly, according to Dr. Russell, 'the porter of Mr. Bourchier Governor of Bombay, a very stout Arab, was bitten by a small serpent, and expired almost instantaneously, after exclaiming that a snake had bit him.' Dr. Russell's information was got from the Governor's son, Mr. James Bourchier, who spoke from memory, and added, 'that the snake, to which the man's death was imputed, was by the Portuguese, called Cobra de Morte; that in the course of twenty years in India he had only seen two of them, one in the island of Bombay, the other in his own house at St. Thomas' Mount nest Madras; that the length of the snake was from six to nine inches its thickness that of a common tobacco pipe; the head black with white marks, bearing some resemblance to a skull and two cross bones; the body alternately black and white, in joints the whole length; that its venom is of all others the most pernicious.'

There can be little doubt from the descriptions given, and from the fact that no diminutive poisonous snake has yet been discovered by naturalists in India, that both the snakes above described were referable to some species of Oligodon. If so, death in each case must be attributed to excessive fright, as it is beyond doubt that none the snakes of this family are provided with poison fangs and glands The Cobra de Morte, like the mythical his Cobra or poisonous lizard has no real existence; but, whereas the latter name is still applied various species of lizards known to be harmless, the Cobra de Morte is now, whatever it once was, a name and nothing more.

Colubridae.

Of the Ground Colubrides belonging to the Coronellina group three species, of whose occurrence within the limits of this district there seems to be no authentic record, are included in Dr. Fairbank's list. These are (1) Humbert's snake, Ablabes Humberti (Jan) which is known to occur in Ceylon, Madras and Peninsular India, (2) the Largenosed Cycloph, Cyclophis nasalis (Gunther), and (3) the Eastern Coronella, Coronella orientalis (Gunther). Humbert's snake is entered as doubtful by Dr. Fairbank, and may have be wrongly discriminated. The distribution of the Cycloph is also is known with certainty. A single specimen of the Eastern Coronela, the sole species of this genus ever found in India, is said to have been obtained by Colonel Sykes in the

Deccan. There is no other record of its occurrence, and the species was founded on this single specimen, which was transferred from the collection of the East India Company to that of the British Museum.

Of the snakes of the group Colubrina, three genera, Cynophis, Ptyas, and Zamenis are represented. The following species occur:

Cynophis helena (Daud) is a rather formidable looking snake, which grows to about forty inches, the tapering tail being about a fifth of the total length. It is distinguished from its congener C. malabaricus, which is said to be common on the Anamalli hills, by having twentyseven instead of twenty-five scales in each row. The markings of C. helena are somewhat peculiar. A narrow black line marks the occipital suture. A broadish black band runs on each side of the neck, below which is a similar oblique band. The anterior part of the back is covered with numerous black cross bands, each enclosing two white ocelli on either side, the white spots being more distinct in the forepart of the trunk than behind. The cross bands disappear about half way down the trunk and are replaced by a broad dark band running laterally on each side to the tip of the tail. As in some of the Tropidonoti, there is a conspicuous black streak running obliquely from the back of the orbit to the gape. The scales are very slightly keeled. This species appears to be rare in the Poona district, and is not included in Dr. Fairbank's List of Bombay Reptiles. Ptyas mucosus (Lin.), the dhaman or Indian Rat Snake, is very common throughout the tract and is too well known to need description. It is an active powerful snake, growing to seven feet in length. It strikes fiercely if pursued or brought to bay, and with its powerful jaws and sharp teeth can inflict a painful bite. From its size and comparative fearlessness, and its diurnal habits, it is perhaps more often seen than any other species, and its size and colour not unfrequently cause it to be mistaken for a cobra. It feeds on rats, mice, frogs, and young birds, and often comes into houses and huts in search of its prev. It is very commonly exhibited by snake-charmers, who show their skill in recapturing it after letting it loose, a feat which requires both nerve and practice, as the *dhaman* is never tamed by captivity.

The bite of this species is not generally considered venomous by natives; but many superstitions are current respecting it. For instance, in the Konkan the bite is said to be poisonous on a Sunday, but harmless on other days. Both in the Konkan and Deccan it is believed that if a buffalo is in the same field with a *dhaman*, whichever sees the other first will survive, while the one who is first seen will die. In the Deccan also the *dhaman* is suspected of milking the she-buffaloes

under water, when the latter take their daily bath in the rivers or ponds. The similar superstition which in England gave the name of Goatsucker to the common nightjar, from its supposed nocturnal raids on the milch goats, will occur to all. [In parts of the Madras Presidency the dhaman (Sardi Pambu, Tamil) is popularly believed to be the male of the cobra (Naga Pambu, Tamil), All cobras are consequently believed to be females! It is interesting to compare with this the converse idea maintained in the Konkan, that all cobras are males, their female partners being the harmless colubrine snakes of the species Zamenis fasciolatus. The dhaman is also in many parts of India credited by local tradition with having a sting attached to its tail, a blow from which is said to cause the part struck to mortify.]

Zamenis fasciolatus (Shaw) is common in the Poona district, as also in the Konkan, where it is called *nagin* by the natives, and is popularly believed *to* be the female of the cobra. It is frequently seen in the baskets of snake-charmers, and is an active reptile of somewhat slender form. The colour of the body is usually an olive brown. Young specimens are marked with numerous white cross bars, from the neck to the tail. With age the white bars disappear gradually, the posterior ones being the first to become obsolete. In old specimens no trace of the cross bars remain. The species grows to about forty inches in length, of which the tail covers nine inches. It is one of the numerous harmless species which are locally thought venomous.

Zamenis brachyurus (Gunther), the Short-tailed Cowry Snake, is found (teste Theobald) in the Poona district and South-East Berar, and Dr. Fairbank, presumably on this authority, has entered the species in his List of Bombay Reptiles. The writer has not, however, succeeded in obtaining a specimen. [Since the above was in type, a specimen obtained by the writer in Poona, and sent for identification to the Calcutta Museum, has been found to agree with Dr. Gunther's original description of the species as published in the Annals and Magazine of Natural History, 1866, vol. XVIII. p. 27. pi. VI. fig. A A'. The single type specimen on which the species was founded also came from Poona, and the snake now deposited in the Calcutta Museum appears to be the only other specimen of the species yet known.] It is described as growing to 21.5 inches of which the tail measures only three inches. The colour is olivaceous above and whitish beneath, while in some specimens, probably immature, irregular yellow-edged brown spots are found on the head and forepart of the trunk.

In addition to the above, Dr. Fairbank includes in his list as inhabiting the Deccan Zamenis gracilis (Gunther), or the slender Cowry Snake,

so called from the similarity of the large black-edged brown spots on the anterior part of the trunk to the cowry shells used as money by the natives. This species probably occurs in Poona, but if so, it must be far from common.

Natricina.

The group of Natricina, or fresh-water Colubrines, is represented by three species of the genus Tropidonotus, which are unaccountably omitted from Dr. Fairbanks list. Tropidonotus quincunciatus (Schl.) the Chequered Water Snake, the panadivad the Marathas, is too well known to need description. It is abundant everywhere in or near rivers, pools, marshes, and canals, wherever frogs and fish are procurable. It differs, however, from the true fresh water snakes (Homalopsidae), winch live more exclusively in the water, in having the nostrils situated on the side instead of on the upper surface of the head. This species swallows its prey directly it is seized, and never overpowers it by constriction. The panadivad is perhaps the commonest and most widely spread snake in India, and although fierce and active, is one of the very few harmless snakes which local tradition rightly acknowledges to be. The colouration of the Chequered Water Snake is very variable, ranging from blackish grey to greenish olive, with from three to seven rows of black spots down the body in quincuncial order. In some specimens the sides are ornamented with orange red spots with dark bars between, which, as usual, are more conspicuous in young than in old specimens. Adults of this species measure up to fifty-one inches in length.

Tropidonotus stolatus (L.), the common little *halhallia* of Bengal, the *naneti* of the Marathas, the *rath* of snake- harmers, is also comparatively common. It is of a brownish olive colour with irregular pale-edged dark-brown cross bars, and is easily distinguished by a pale buff streak running longitudinally on each side of the back from neck to tail. At some seasons the head, neck, and sides acquire a bright red tinge. Its maximum length is two feet. It is more terrestrial in its habits than the Chequered Snake and is of a milder disposition; nevertheless it is wrongly believed to be venomous by the natives.

Tropidonotus plumbicolor (Cantor), the common Green Grass Snake, is also abundant in the Poona district, especially in the rains, when the young broods make their appearance. Young specimens have a broad bright yellow collar, pointed in front and forked posteriorly, behind a black collar of corresponding shape. The body is also marked with about a dozen narrow black cross bars. The bright collar and cross

bars disappear with age, and adults are a uniform dull green above and white below. The under-parts in the young snakes are steel blue. The species grows to about twenty-five inches, and is of thick make, with a broad head and a short tail. Its food consists of frogs, which it catches in the wet grass during the rainy season, often pursuing them into houses. It is of course harmless.

Homalopsidae.

HOMALOPSIDAE. The true Fresh-water or Estuarine Snakes, Homalopsidae, have no representatives in this district.

Psammophidae

PSAMMOPHIDAE. Nor have any species of the family of Desert snakes (Psammophidae) been found. The best known example of this family, Russell's Condanarouse (Psammophis condanarus, Merr) occurs in parts of the Madras Presidency.

Dendrophidae.

DENDROPHIDAE. Of the Tree Snakes of this family no species have been recorded from this district.

Dryiophidae.

DRYIOPHIDAE. Of the family of Whip Snakes consisting of the genera Tragops and Passerita, the only species hitherto found in the Poona district is the well-known green whip snake (Passerita myeterizans, L.), which is found on trees in and near the Sahyadri range. This is evidently the species to which Dr. Fairbank alludes in his list as a Dendrophis; but the long flexible snout and excessively slender form of this species at once distinguish it from any species of the Dendrophidae. In colour this snake is bright grass-green, lighter beneath, with a yellow lateral line along each side of the abdomen. Large specimens grow to six feet in length, of which the tail occupies rather more than one-third. The natives name this Whip Snake *sarptoli* and it is popularly believed to hang on the boughs of trees with its tail, and dart at the eyes of passers-by. In reality it is a very inoffensive reptile, which bites only under severe provocation. Its chief food consists of small birds and lizards.

Dipsadidae.

DIPSADIDAE. This family of Tree Snakes, characterised by a strongly compressed body and a short triangular head, is represented by at least one species, Dipsas trigonata (Boie), which is found in wellwooded tracts near the Sahvadri range. The short viper like head of this snake often causes it to be mistaken for a venomous species, but like all the snakes of this family it is harmless, although fierce and remarkably active. The ground colour is olive brown. The crown of the head is marked with two dark black-edged bands convergent behind, while a yellowish zigzag and irregular band, edged broadly with black, runs down the median line of the back. Underneath it is white or sometimes salmon-coloured mottled with brown specks. It grows to at least forty inches, the tail being about one-fourth of the total length. A closely allied species, Dipsa gokool (Gray) is comparatively common in the Ratnagiri district where, like numerous other harmless species, it bears the name of manyar and is believed to be very deadly. D. gokool probably occurs also above the Sayhadris. Another tree snake of the same, genus, but of considerably larger dimensions, Dipsas forsteni (D. and B.), is entered in Dr. Fairbank's list as being found in the Sahyadri range; but as both Dipsas trigonata and gokool are omitted from this list it is possible that one of these latter species has been taken for Dipsas forsteni.

Lycodontidae

LYCODONTIDAE. Of this family the common Lycodon, L. aulicus (L.), is the sole representative. It is frequently found in houses which it enters in pursuit of the skinks or snake-lizards (Mahr. sapsarali) which form its chief food. It also preys on the little houses geckos so common on the walls of bungalows. As a rule and species of snake which is discovered in a dwelling house, other than a cobra or a dhaman, is vaguely termed a Carpet Snake by Europeans in India whose knowledge of snakes is usually very limited But the name of Carpet Snake is probably more often applied to this species than to any other. The Lycodon, though fierce and active, is perfectly harmless and is usually nocturnal in its habits. Its colouration however, in some specimens, rather closely resembled that of the venomous Krait, Bungarus coeruleus (Schn.), which is common in Bengal, Assam, and the peninsula of Southern India but is not found, fortunately, in the Bombay Presidency, except a the province of Sind, where it is called the *pioni* according to Dr. Fairbank, from its supposed habit of sucking the breath of sleepers. The bad reputation borne by the Lycodon is doubtless due to its resemblance to the really dangerous Krait. The Lycodon is rather variable in colour. The commonest type is a reddish brown ground, barred with numerous dark-edged white or faintly

yellow cross bands, the first of which forms a broadish dull white collar. But the ground colour and pattern of the bars vary much in differed specimens. The darkest coloured individuals are those which most resemble the Kraits. In old specimens the white cross bad disappear, and the yellow tinge sometimes seen in the cross bars quickly fades in spirits. It grows to about two feet of which the tail measures one-sixth. The eye of the Lycodon is small and very black, with a vertical pupil, whereas the Krait has a round pupil. The latter may also be, readily distinguished from the harmless Lycodon by a glance at the vertebral scales, which in the Krait are much broader than the other scales of the body and hexagonal in shape, forming a conspicuous ridge on the median line of the back; whereas in the Lycodon the vertebral series of scales is no larger than the other rows. The dentition of the Lycodon is peculiar, as, unlike most other harmless species, each maxillary is furnished with two enlarged fangs in front, placed in a transverse line, the outer being much larger than the inner. But no snakes of this family have posterior grooved teeth, and, as Gunther has pointed out, the use of the fangs in front of the jaws is to pierce and hold fast the hard smooth scales of the lizards on which it preys. In the Konkan the Lycodon is one of the many harmless species to which the name of *manyar* is applied, and which are popularly believed to cause death by a touch of the tongue or by casting their shadows over their victims.

Amblycephalidae.

AMBLYCEPHALIDAE. The Bluntheads (Amblycephalidae) have no representatives in this district.

Pythonidae.

PYTHONIDAE. Of this family, numbering two species, the well known Indian Rock Snake, Python molurus (L.), is found occasionally throughout the district, and called by the natives in different localities ajgar, ar, and chitai. It inhabits thick forests and groves, usually in the neighbourhood of water or swampy ground, where it finds a regular supply of food in the animals which come to drink. Birds of all kinds, squirrels, rats and mice, and even young deer and sheep contribute to its support. It is one of the largest of living reptiles, but its size and power have no doubt been occasionally much exaggerated. Specimens of twenty feet long have been frequently obtained, and as specimens of its congener of the Malayan Peninsula, Python reticulatus (Schn.), have been recorded as measuring about thirty feet, it is probable that P. molurus may occasionally attain the same length. The majority of

specimens however exhibited by snake-charmers seldom exceed twelve feet. Rock Snakes from fifteen to twenty feet long' writes Gunther The Reptiles of British India, p. 329. have the thickness of a man's thigh, and will easily overpower a small deer, a sheep, or a good-sized dog. But although able to kill these animals, the width of their mouth is not so large that they can swallow one larger than a half-grown sheep. The way in which they seize and kill their prey is the same as that observed in numerous smaller snakes: after having seized the victim, they smother it by throwing several coils of the body over and round it. In swallowing they always begin with the head; and, as they live entirely on mammals and birds, the hairs and feathers offer a considerable impediment to the passage down the throat. The process of deglutition is therefore slow, but it would be much slower except for the great quantity of saliva discharged over the body of the victim. During the time of digestion, especially when the prey has been a somewhat large animal, the snake becomes very lazy: it moves but slowly when disturbed, or defends itself with little vigour when attacked. At any other time the Rock Snakes will fiercely defend themselves when they perceive that no retreat is left to them. Although individuals kept in captivity become tamer, the apparent tameness of specimens brought to Europe is much more a state of torpidity caused by the climate than an actual alteration of their naturally fierce temper. Notwithstanding the above, however, the tame Pythons exhibited in this country by snakemen, whether, from overfeeding or other causes, are usually very gentle creatures, and, unlike the restless dhamans, can be easily and safely handled. One peculiarity of the Pythons is that they incubate their eggs, and the temperature of the body at this season has been observed to be higher than at other times.

The ground colour of the Indian Rock Snake is usually a greyish brown. The crown and nape of the head are marked with a brown spot like the head of a lance. The back and tail are adorned with a vertical series of large brown quadrangular spots, with an oblong spot on each side of the central line. The sides of the body have another series of irregular pale centred brown spots. The snout is long and depressed, and in adult individuals a rudimentary hind limb, hidden between the muscles, may easily be discovered on each side of the root of the tail.

Erycidae.

ERYCIDAE. The family of Sand Snakes or Erycidae has two representatives in this district, both of which are comparatively common.

The parad, Gongylophis conicus (Schn.), is frequently seen within cantonment limits at Poona, and is common elsewhere in the district. It is a very thick clumsily made brown snake marked on its back with large brown blotches, which frequently unite and form a broad zigzag band, and on each side is a row of smaller irregular brown spots. The tail is very short and tapering, and the head, which is scaled not shielded, except at the lips and forepart of the snout, is flat, oblong, and scarcely distinct from the neck. The general character of the markings resembles that of the Python, and the parad like the latter has rudimentary hind limbs. Parads are indeed often exhibited by snake-charmers as young Pythons. The maximum length of the parad is about twenty-five inches. In young specimens the markings are very distinct, and the underparts, which are white in the adult, are suffused with a pale salmon tinge.

The Two-headed Snake, the dutonde of the Marathas, Eryx johnii (Russ.), is also common in the Poona district in dry stony fields where it preys on mice. Its colour is usually reddish brown irregularly dotted with black, while young specimens have a series of brown rings distinct on the hind part of the body and getting fainter towards the neck. The lower parts are pale, marbled with dark in the adults, and in young specimens steel-blue spotted with salmon colour. Like the parad it is thick and heavy and very slow in its movements. Its chief characteristic is its short thick rounded tail, which the snake-charmers frequently mutilate in order to give it the appearance of a second head. The real head resembles that of the *parad* in being covered with scales instead of shields, and in not being distinct from the neck. It grows to about four feet, of which the tail only occupies four inches. This species, like the other members of the family, has the conical prominences in the place where the hind limbs ought to be. The dutonde is perfectly inoffensive, and cannot be made to bite under any provocation. It avoids wet ground and prefers sandy plains, where it can burrow with ease. In the Deccan this snake is generally called the mandul.

Acrochordidae.

ACROCHORDIDAE. The Wart Snakes or Acrochordidae with small tubercular or spiny scales are not found in this district.

Elapidae.

Of the Elapidae embracing the genera Naja, Ophiophagus, Bangarus, Xenurelaps, and Callophis, the only representative in this district is the

well known Cobra, nag, Naja tripudians (Merrem.). Cobras are no doubt abundant in the Poona district; but as they are chiefly nocturnal in their habits, by no means aggressive, and from their large size easily seen and avoided, the mortality attributable to their deadly bite is fortunately very low. At least eight varieties of this species have been enumerated by Gunther, all referable to the same species, but the type usually seen in the Deccan is of a uniform brownish olive colour above, with a pair of conspicuous white black-edged spectacles on the dilatable neck or hood. The length of Cobras is a subject of almost as much dispute amongst Europeans in India as the length of tigers, and the natural tendency in such cases is to exaggerate the size. Specimens of over five feet in length are decidedly rare, and the limit of seventy inches given by Theobald is probably correct. The fables relating to the Cobra handed down by local tradition would fill a volume. Although, however, it is popularly credited with a sagacity and cunning of which it is entirely innocent, it is unfortunately impossible to exaggerate the deadly effect of its bite, for which no reliable antidote has as yet been discovered. The Cobra impartially feeds on birds, rats, squirrels, lizards, frogs, and sometimes fish. It climbs trees and roofs of houses in search of prey, and although generally terrestrial, swims well, and readily takes to the water. It has occasionally been caught at sea at a considerable distance from land. The Hamadryad, Ophiophagus elaps (Schl.), the gnahn of the Burmese, which from its greater power and fierceness is even more dangerous than the Cobra, is luckily not found in Western India. The Krait, Bungarus coeruleus (Schn.), occurs in Sind, but probably nowhere else in the Bombay Presidency. The long slender venomous snakes of the genus Callophis, which feed on the Dwarf Snakes (Calamaria), and have the same geographical distribution, have not yet been observed in the Deccan, though one species, Callophis nigrescens (Gunther), inhabits the Nilgiris and the Wainad.

Hydrophidae.

The Sea Snakes or Hydrophidae, which are found in salt water exclusively, and which are without exception venomous, are not found in any of the inland tracts.

Viperidae.

The true vipers which have no pit in the loreal region are represented in India by the genera Daboia and Echis, having each one species. Of these one only, the *phursa*, Echis carinata (Merrem.), is known with certainty to occur in the Poona district. It is extremely abundant in the

coast districts of Ratnagiri, Thana, and Kolaba, and is found more sparingly in the barer portions of the summit of the Sahyadri range or Konkan Ghat Matha. East of the Sahyadris it is seldom seen. The comparative immunity of the Poona district from deaths by snake-bite is no doubt due to the scarcity of the Echis, which is the chief agent of destruction in other districts where it is plentiful. Gunther was strangely in error when he wrote that no case was known of its bite having proved fatal. The Echis has a wide distribution. It is found in Sind and the Panjab, North-Western, Central, and Southern India, and is exceptionally common on the Western coast; but it is absent or very scarce in Lower Bengal, and it is rare in the Deccan. In Sind it is known at the Kapar and at Delhi as the aphai. The Echis is a little brown; snake seldom exceeding twenty inches in length, with a series of dark-edged pale ovate spots on the body, with a very conspicuous undulating pale line down each side. The head is covered with keeled scales and the pupil is vertical. The *phursa* is most often found in rocky hill-sides and plains, living under the shelter of large boulders, and feeding on centipedes; but it occasionally enters houses, and has an awkward habit of taking its siestas on roads and footpaths, whence it will not stir on the approach of man, but will suffer itself to be trodden on rather than move. This peculiarity makes it especially dangerous to bootless travellers, should they tread on it unawares in the dark. Once roused it is fierce and active, and will defend itself with great vigour and courage. Of all the venomous snakes in Western India this little viper is undoubtedly by far the most destructive. Its bite is not probably attended by fatal results more than once in five times; but its diminutive size and obstinate immobility give it far more frequent opportunities a biting than has any other species of venomous snake. The symptoms of *phursa* bite are also peculiar and may be readily distinguished. The venom, unlike that of the Cobra, liquifies the blood, and induced excessive hemorrhage [The peculiar hemorrhage induced] by the bite of this viper seems to have been noted by old writers. In his work on Destruction of Life by Snakes in Western India, Ex-Commissioner quotes a passage from the Physician Johnstonus, which evidently refers to the Echis: 'Is enim in eo tractu quo Alexander Porum perseguebatur inventos fuisse serpentes parvos guidem, ad eorumque morsum toto corpore sanguineum sudorem dimanasse'. That is, For he (says) that in the country in which Alexander followed after Porus certain small snakes were found at whose bite a bloody sweat oozed from the whole body. at the bitten part, and in severe cases bleeding at the gums and from the pores of the skin, followed by lockjaw. The action of the virus is, however, very slow, and in fatal cases the average interval between the bite and death is about 4½ days. The application of ammonia has been found after trial to

aggravate rather than reduce the hemorrhage which is the chief source of danger. For some years past a native remedy, the root of the pangla shrub, Pogostemon purpuricaulis, has been used at the Ratnagiri Civil Hospital, with some apparent success in stopping the troublesome bleeding. The root is given both internally and a paste for outward application; but its property as a styptic does not yet appear to be known to Indian dealers in drugs. The results obtained with its use for this purpose are however sufficiently encouraging to justify a careful and exhaustive analysis of the plant by competent authority. The Pogostemon purpuricaulis is a plant of the labiate order, nearly allied to the Patchouli shrub, and is found abundantly in the Konkan and in the western sub-divisions of the Poona district. [Further information as to the Echis, with a more detailed account of the symptoms induced by its bite, will be found at pages 51-52 of Vol, X. of the Gazetteer of the Bombay Presidency, Ratnagiri and Savantvadi.]

The Chain Viper or Daboia, the Cobra Manilla (Coluber monileger) of the Portuguese, the tic polonga of Ceylon, the ghonas and kandor of Konkan Marathas, Daboia russellii (Shaw), has a wide distribution in India, ranging from Ceylon to the Himalayas; but if it occurs at all within the limits of the Poona district, it must be very rare. It is known, however, to occur in the Southern Konkan, as well as in Cutch and Gujarat in the Bombay Presidency, and it is probable that it will be found in or near the Sahyadri range. It grows to about sixty inches and is handsomely marked by three chains or necklaces of large black white-edged rings, the middle series being oval in shape, and the outer circular. The head is marked with two yellow lines converging on the snout, and is peculiarly repulsive. The Daboia is thickly built and sluggish, and like the phursa shows great reluctance to move on the approach of man. It is nocturnal in its habits, and feeds on rats and mice and sometimes attacks sitting hens. It is fierce and fearless, and on this account, as well as from its long powerful fangs and its deadly venom, is perhaps more to be dreaded even than the Cobra or the Hamadryad.

Crotalidae.

The Pit Vipers, Crotalidae, so called from the deep pit in the loreal. region, of which the American Rattle Snakes are the best known examples, are represented in India by the genera Trimeresurus, Peltopelor, Halys, and Hypnale. One species of the Trimeresurus or Tree Vipers with prehensile tails, Trimeresurus strigatus (Grey), is said by Gunther and Theobald to inhabit the Deccan or the Nilgiris. Another, T. anamallensis, occurs in the Anamalli Hills, as does

Peltopelor macrolepis (Beddome). One species of Halys, H. himalayanus, is restricted to the Himalayan region, while another, H. elliotti, has been found on the Nilgiris. Hypnale nepa, the 'Carawala also occurs in the mountains of Southern India. As far, however, as can be ascertained, there is no authentic record of the occurrence of any species of Pit Vipers within the limits of the Bombay Presidency. The Indian Pit Vipers are usually of small size, and though venomous are much less dangerous than their cousins of the new world.

Snake Charmers.

The small gangs of professional jugglers who frequently visit Poona and other large towns in their wanderings, exhibiting snakes, and performing conjuring tricks, belong to the tribe of Madari Garudis. They are Muhammadans, said to be of Arabian descent. Like other Musalmans the Garudis are distinguished among themselves as belonging to one or other of the four main tribes, and are known accordingly as Madari Syeds, Madari Shaikhs, Madari Moghals, and Madari Pathans. They speak a corrupt Hindustani, and are worshippers of Samna Mira. There is a tomb of Samna Mira at Tasgaon in the Satara District, in whose honour a fair is held annually in magh (February-March), They circumcise their boys, obey the Kazi, and marry only among the four tribes of Madari Garudis. The Garudis have no fixed homes, but wander from town to town wherever their performances are likely to attract spectators and bring money. No one party appears to have any exclusive beat, though the same gang frequently revisits the same towns. The males only, of all ages, take part in the performances. While travailing from place to place they occupy their time in hunting for snakes, ichneumon, and scorpions, practising their tricks, and training the boys. The snake-charmers are quiet and inoffensive, and are not reckoned among the criminal tribes like the more turbulent Hindu Mang Garudis, with whom they have nothing in common except the name of Garudi.

The stock in trade of a family of Garudis includes, firstly, a fusty but capacious bag, well worn and patched all over, containing a very heterogeneous collection of odds and ends, and rude apparatus used in their various juggling tricks; secondly, two or more flat circular bamboo baskets for holding the snakes and slung on a polo for greater convenience in transport; thirdly, the *pungi* or double-pipe made of a gourd with two hollow bamboo tubes, inserted as mouth-pieces; and lastly, a diminutive drum or tom-tom, shaped like an hour-glass, with a button loosely attached by a string tied round the middle, which is made to strike the drum on each face in succession, by a smart turn of

the wrist. Add to these an ichneumon, a hubble-bubble or cocoanut pipe, which serves at once for tobacco smoking and holding fireballs, and a few black scorpions with the stings extracted, and one or two small harmless snakes carried in pieces of hollow bamboo, and the Garudi's outfit is complete.

The snakes usually kept for exhibition are Cobras, Pythons, and Rat Snakes, with occasionally a Sand Snake, or so-called two-headed snake with the tail mutilated so as to resemble the head. A few specimens of common harmless snakes, such as the chequered Water Snake and the fasciolated Cowry Snake, are also kept to be sacrificed to show the skill of the ichneumon, when the occasion does not demand the more exciting fight between the ichneumon and the cobra. Vipers are seldom found in the snake-charmer's collections, being too sluggish and ill-tempered for exhibition. The poison fangs of the Cobras are invariably extracted as soon as they are caught, and the fang matrix is sometimes cauterised as an additional precaution to prevent possible danger by the development of new fangs to replace the old.

Most of the snakes exhibited can be fed in captivity without difficulty; a hungry Python is always a good excuse for demanding a chicken to appease his appetite after being exhibited, while frogs are always easily obtained and gratefully accepted by the greedier *dhamans*. Cobras are said to persistently refuse food in confinement, and have either to be crammed or let loose at intervals of a month or so to find their own food, and be recaptured, if possible, after repletion.

The capture of wild Cobras is a comparatively easy task to those who know their habits, and have nerve to handle them. When a Cobra frequents a rat-hole, as it generally does, it betrays its occupancy by wearing the mouth of the hole smooth and leaving thereon a little slimy deposit. The Garudis, on finding such evidences of the snake's haunts, dig quietly into the hole, until the tail of the Cobra is exposed to view. Seizing the tail with one hand, the snake-catcher rapidly draws the Cobra through the other hand, up to the neck, where it is firmly grasped on each side by the finger and thumb in such a way as to render the snake powerless to bend its neck in either direction. The fangs are then as soon as possible extracted with a pair of pincers, and the Cobra is carefully secured in an empty basket. Dhamans are sometimes caught in holes in a similar manner, but more often are pursued and captured in open ground. To catch a large dhaman in this way is a feat requiring great dexterity and some courage; for, this snake, although not venomous, is very fierce and active, bites

savagely, and often wounds with a smart stroke of its powerful tail. The length of a *dhaman* moreover frequently makes it impossible to draw it with one hand through the other at one stroke, from tail to neck. In such cases, the man, seizing the snake by the tail, eventually gets a grip of its neck by a guick hand-over-hand movement, while at the same time the snake is prevented from turning on its captor by being violently swung from side to side with each movement of the hand. But in so doing the snake-catcher, if not very dexterous, is very liable to be bitten, especially in the face. As the Rat Snakes never lose all their fierceness in captivity the same process has to be repeated on each occasion that they are let loose, and the recapture of a savage dhaman is one of the most skilful feats performed by the exhibitor. Chequered Water Snakes are also fierce, active, and untameable, but are easily caught in a gorged state, in the shallow streams and canals, which they frequent. The smaller snakes are generally caught by the aid of a bamboo stick split into two pieces at one end, and thus forming a rude forceps. Of the snakes usually exhibited the Cobra is perhaps the only species which can be really tamed. Pythons, fierce by nature, are probably kept in a state of lethargy by frequent feeding. Cobras on the other hand are naturally gentle in disposition, and, after a few lessons, are easily made to stand with hood erected, by rivetting their attention on some object kept constantly moving before them, from side to side.

The pungi or gourd-pipe is invariably played as an accompaniment to the Cobra's dance, as it is called, as well as to every juggling trick performed by the Garudis. But the dismal monotone of this weird instrument is an accessory and nothing more. Snakes hear imperfectly, and according to Dr. Nicholson, the Burmese snakemen put their Cobras through exactly the same performances without any musical accompaniment. The *pungi* has probably no more effect on the movements of the Cobra than it has in causing the basic growth of the mango tree, through all its stages, from seed to fruit, or the marvellous disappearance of the little boy in the well-known basket trick. The Garudis profess indeed to charm Cobras from their holes by the sound of the *pungi*, and it is possible that a tame Cobra, which has been placed by its keeper in a hole to simulate a wild one, may be sufficiently aroused by the familiar droning of the pipe to show itself at the mouth of the hole. It is extremely doubtful, however, whether a wild snake would be similarly attracted by the noise. It is a very common trick amongst the Garudis, on visiting a compound where they are likely to obtain an audience, to secretly place a tame Cobra in any hole that may suit the purpose, and then, pretending to have discovered a wild one, show their skill in catching it. This very simple

ruse answers admirably if the snake-charmer is allowed to conduct his pretended search where he pleases. In this case he has only to lead the; spectators gradually to the spot selected, examining a few holes by the way, which he confidently pronounces to be empty, and finally stopping at the right hole, with an air of triumphant mystery, produce his tame snake after much ceremony and gesticulation to the usual accompaniment of slow music. Sometimes, it happens: that one of the audience knows or pretends to know of some particular hole frequented by a Cobra, and desires the snakemen to charm and catch it. In this case the snake-charmer has no opportunity of placing a tame Cobra beforehand in the hole, with intent to deceive. But he is generally equal to the occasion; for one of the party, with an eye to this contingency, nearly always carries a tame Cobra cunningly concealed in the folds of his waistcloth, which by very ordinary sleight of hand he can, unseen by the spectators gradually insinuate into the hole, while pretending to examine the entrance. Stories are indeed told of these men being carefully stripped and searched beforehand, to satisfy the spectators that they have no snake concealed about them, and then taken to some holes, of which they could have had no previous knowledge, whence they have notwithstanding produced Cobras. But in all such cases it will generally be found on inquiry that although the spectator may have satisfied themselves by previous search that no snake was concealed about the performer, no subsequent examination has been made of the snake itself to ascertain, by the presence or absence of fangs, whether it was a wild or a tame one. If the snakeman shows a decided reluctance, as he usually does, to the captured snake being killed or examined, it may be safely inferred that, whether subjected to previous search or not, he has somehow contrived to produce in the exact nick of time one of the fangless specimens in his collection.

The Garudis know well the difference between venomous an harmless species of snakes, and will handle the latter fearlessly. But if they have credulous listeners, they delight in telling exaggerate and fanciful tales as to the dire consequences of the bite of an earth-worm, or an innocent Rough Tail. It is not known whether these snakemen, if accidentally bitten by a Cobra, and they seldom meddle with other venomous snakes, have recourse to anything as a supposed antidote. Johnson, the author of Indian Field Sports, who emplayed a party of Kanjurs in Calcutta to catch snakes for him a year, writes of these people, that whenever they attempt to catch snakes there are always more than one present, and a second person carries with him a gudgudi which is a smoking machine, made generally of a cocoanut below, with an earthen funnel above, containing fireballs; in the fire

they have always secreted a small iron instrument about the size of a prong of a table-fork, curved into the shape of a snake's tooth, tapering from above, and whenever they are bitten they first put on a light ligature above the bite, then suck the part, and as soon as blood appears they introduce this instrument red-hot into the two orifices made by the teeth, and take some bazar spirits, if they can procure any, in which they infuse a small quantity of bhang.' As far as this author could learn, these were the only remedies ever adopted. The Garudis frequently carry with them the so-called snake stones, but probably profit more by their sale than by their use. These stones, found on analysis to be made of calcined bone, are black, highly polished, and shaped like almonds. Similar stones appear to be manufactured in other parts of the world, as in Mexico, where the material used is charred stag's horn. These snake-stones have the property of absorbing liquid up to a certain point, and if applied to a wound will adhere and draw out the blood, until saturation prevents further absorption. [An interesting account of the manufacture and properties of snake-stones will be found in Wood's Natural History, III. 144.] Besides the ordinary black snake stones the Garudis occasionally offer for sale as charms small transparent beads of the size and shape of acidulated lemon drops, which they audaciously profess to have extracted from the palates of very old male Cobras. It is not known how or where these beads are obtained, or of what substance they are composed. In their general consistence they appear to be like pieces of pale amber. In some parts of India the snake-charmers use the root of a plant to stupefy snakes and scorpions. A few pieces of root are placed in a bag in which the snakes or scorpions, as the case may be, are kept, and in a few minutes the patients are said to become comatose. Possibly the root used may be that of the Aristolochia indica, or Indian birthwort (isharmal, Hind.), well known as a supposed antidote in cases of snake-bite. The roots of allied species of birthworts are used in other countries, both as antidotes to the poison and for stupefying snakes. In North America the well known Virginian snakeroot, Aristolochia serpentaria, is used as an antidote, while in South America the 'Guaco,' a similar root is employed for the same purpose and also for stupefying snakes, the juice extracted from the root being dropped into the snake's mouth. Similarly, the Egyptian snakecharmers are said to use an African species of birthwort to make their snakes docile during exhibition. In Western India the Garudis appear to have recourse to no such expedients, and, as far as can be judged, the snakes exhibited by them never show any symptoms of having been drugged.

[Contributed by Mr. Henry Wenden, District Engineer, Great Indian Peninsula Railway.] The Poona rivers and streams are fairly stocked with fish. From the middle of June, when the south-west monsoon sets in, until Production Fish. the end of October, the rivers and streams are in full volume. With the close of the rains their waters gradually subside, and, by March, they form'a series of pools connected by long reaches of feebly running stream. Some of the pools are long, deep, and rocky, safe sanctuaries for fish; others are shallow, easily netted or emptied in sections with the help of temporary dams. By the end of April the shallow pools have been plundered of all their fish-life.

During the rains, every highland stream is beset with basket-traps or minute bag-nets which effectually prevent the return to the main waters of fish that have run up the small streams to breed. Very few of the fry escape. In the lower reaches are numerous natural or artificial dams or narrowings of the water-way, in which, during breaks in the rainfall and in the final shrinking of the rainy-season floods, are set immense bag-nets with meshes varying from two inches at the mouth to a quarter of an inch at the tail or bag. These nets are usually set for ten to twelve hours, and taken up morning and evening. As much as 300 pounds weight of fish are frequently taken from one such net, composed of specimens varying from an inch to several feet in length. Fry predominate to a painful extent; many of the mature fish are heavy with spawn and milt; and all are crushed into one mass by the force of the stream.

No private rights to fisheries exist, but each village claims the river within the limits of its own land. In some sacred dohs or pools the priests prevent the people from fishing. In the absence of any legislation for the protection of fish, these sacred breeding places are the only safeguard for the preservation of the supply; it would be an incalculable gain to the mass of the people if they were more numerous. [The chief sacred pools or dohs where fish are never killed are: In the Haveli subdivision, Tukarambava's pool in the Indrayani at Dehu, and Moraya Gosavi's pool in the Pauna at Chinchvad; in Bhimthadi, Bhivai's pool in the Nira at Kambleshvar; in Purandhar Holkar's pond at Jejuri; in Sirur, Santbava's pool in the Bhima at Ranjangaon; in Indapur, Ojhraidevi's pool in the Nira at Ojhre and Sonhoba's pool in the Bhima at Narsinhpur in Khed, a pool near the ferry at Kashekhed, Mahadev's pools at Chandoli Vetale and Pangri, the Vrindavan pool at Donde, Madhaveshvar's pools at Saygaon and Mohokol, the Umbar pool at Kadhe, Mhasoba's pool at Bibi, Gadad Narayan's pool at Kahu, the Pimpal pool in Koyali in Vade, Avli in Kashevadi, Dham in Surkundi, Bhand in Tiphanvadi and Goregaon,

Maud in Valadh, Kand in Shiroli, Gajrai at Nimbgaon, all in the Bhima; and Tukarambava's pool at Yelvadi, and Chakra-tirth at Alandi.]

The chief fishing classes are Marathi Bhois and Koli Bhois, but few of either class live solely by fishing. Where not forbidden they catch fish at all seasons and by every means in their power. The following account from Dr. Day's Fishes of India describes the devices for catching fish which are in use throughout the Poona district: As soon as the young fish are moving, that is shortly after the rains set in, men women and children catch myriads of fry in rice-fields and in every sheltered spot to which the fish have retired for shelter. Nets are employed which will not allow a mosquito to pass, and so far as human ingenuity can contrive it, the sides of the rivers are stripped of fish. Husbandmen make wicker-work traps, baskets, and nets, and first set them so as to trap the breeding fishes on their way up stream to their spawning grounds, and afterwards torn the traps so as to catch the fish in their down-stream journey. Streams are strained to capture the fry, and no irrigation channel is without its wicker-work trap.

The minimum size of the mesh of the fresh-water nets is shown in the following return which is compiled from ninety-one reports:

| | SIZE OF MESH IN INCHES. | | | | | | | | | | |
|---|-------------------------|-----|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------|------------------|
| 1 | Below 1 | 1/2 | ¹ /3 | ¹ /4 | ¹ /5 | ¹ /6 | ¹ /8 | ¹ /10 | ¹ /12 | ¹/16 | ¹ /32 |
| 5 | 5 | 18 | 5 | 24 | 1 | 5 | 18 | 4 | 2 | 3 | 1 |

FRESH-WATER FISHING NETS.

In fifty-three of seventy more returns the size of the mesh is compared to a grain of wheat, pearl, Indian maize, gram, split pulse, oil seed, barley, tamarind seed, a small pea, a pepper-corn, to a hole large enough for a big needle a bodkin or a quill or to the openings in coarse muslin. [Day's Fishes of India, XI.]

The mesh of the nets varies with the season of the year and the size of the fish. Rivers are dammed and diverted for fishing, and the still more wasteful system of poisoning water is sometimes practised. Fish are poisoned by the leaves, bark, or juice of various plants, chiefly the *kuchla* or *kajra* Strychnos nux-vomica, the *ramet* Lasiosiphon

speciosus, the *supti* Tephrosea suberosa, and the *hingan* Balanitis roxburghii. Mr. Thomas in The Rod in India also mentions among fish poisons, Croton tiglium, Anamirta cocculus, Capsicum frutescens, and *kare kai* (Tulu) Posoqueria nutans or longispina. [On the Bombay side *kare kdi is* known by the name of *ghela*.]

Occasionally dead or night lines are systematically set. What is known as the Indian Trimmer is a favourite device. A stout pliant bamboo rod eight to twelve feet long is stuck in the bank in a sloping position, or sometimes in shallows several bamboos are set stretching in a line across the river at intervals of a few yards. From the point of the rod is hung a line with the hook passed through a cord tied round the waist of a frog so that it may paddle on the surface of the water. At times the line is dropped from the bough of an overhanging tree. This device is very effective, especially in turbid water, and large fish and water-snakes are often taken.

True angling with a hand-rod is practised in an unscientific, almost childish, manner by idlers or pot-hunters.

A few men labour day after day with the *pagir* or *bhor jale* that is the light casting net with poor results. But as a rule the methods which involve the minimum of labour are most in favour. The *malai* or basket-trap, the *khabri* or bag-net, the *bhuse* or *tivri* which may be described as floating entanglements, and the trimmer, take but a short time to set and gather in, and may be left to themselves for twelve hours or more. These may therefore be looked on as the commonest means of catching fish. The nets chiefly used are:

- 1. A light easting net called *pagir* or *bhor jale*.
- 2. A heavy casting net called *sark*, of strong cord and large mesh used in catching large fish in fast water. A cord is passed through the meshes at the outer diameter of the net, which, on being drawn tight, closes the mouth and the fish are, as it were, caught in a closed bag. After being thrown and closed this net is drawn in mouth foremost.
- 3. Bag-nets called *khabris* are fixed in strong currents generally produced by building rough stone dams with openings.
- 4. A net called *bhuse* varying in length, but often 500 feet long and two feet broad, of fine cord and large mesh, are so floated along the upper and lightly weighted along the lower edges that it remains at or

near the surface. It is left stretched across a pool for hours, usually for a whole night, and fish attempting to pass are entangled.

- 5. Another net called *tivri* differs from the *bhuse* in having larger meshes and in being so weighted as to lie near the bottom of the pool. It takes large fish.
- 6. Drag-nets called *pandis*, six feet to eight feet deep and of varying length, are floated at the top and weighted at the bottom where there is a bag or pocket.
- 7. A net called *jhile* or *pelui* is fastened to a triangular frame of bamboo, and is used in much the same way as the European shrimping net.
- 8. A plunge net, called *choba*, is a bag-net fixed to an iron or bamboo ring, from which rise three bamboo rods which are fastened together at or near the tail of the bag. The fisherman wades in the shallows, and plunges the net to the bottom; and passing his hands through the hole at the tail of the net, catches any fish that are imprisoned by it.
- 9. The *lavkari* can only be described as a bag-drag net. It is often seventy to eighty feet long with a diameter of thirty feet at the mouth. As it requires as many as fifty men to work and costs as much as £20 (Rs. 200) it is not commonly used.

Many simple modifications of these nets are called by different names.

The nets are mostly designed for the capture of very small fry, Except the *bhuse* and *tivri* which may be termed entanglement though they are exceedingly fine and light, a fish is rarely able to burst through these nets. A fin is sure to catch and the fish in its efforts to get free wraps itself in the net.

Most of the people of the district eat fish. About thirty kinds of fish are offered for sale in the Poona market at prices varying from $1\frac{1}{2}d$. to $1\frac{1}{2}d$. a pound (2 - $2\frac{1}{2}$ annas a sher). Five kinds are common eaten by Europeans, vambat Mastacembalus armatus, ahir Anguilla bengalensis, three marals Ophiocephalus marulins, O. leucopunctatus and O. striatus, shivada or pari Wallago attu, and shengal or shingala Macrones seenghala. These fetch 4d. to $4\frac{1}{2}d$. a pound (5 1/3-6 annas a sher).

If the people studied their interests they would give up basket-traps and bag-nets of minute mesh and cease poisoning pools. Were netting stopped between the 1st of September and the 30th of November, mature breeding fish would not be destroyed, and the fry would increase. And if, from the 1st of December to the end of March, no nets with a smaller mesh than one inch were used, the supply of food would be largely increased. The fry would grow until March between which and June, as in early life fish increase in weight with astonishing rapidity they would yield an infinitely greater supply of food than if, as at present, they were destroyed in infancy. It is believed that though the supply of fish were increased twentyfold it would not exceed the demand.

Many pools, ponds, and lakes in the district are well suited for the systematic rearing of fish. It is possible to cultivate water as profitably as land. Indeed, in China, where fish-rearing has been a science for thousands of years, an acre of water is considered more valuable than an acre of land. In the Poona district, an acre of water, if not used for irrigation, is worth nothing. Any pond within fifteen miles by road or thirty miles by rail of a European settlement might be made a source of considerable revenue. In Poona coarse tasteless fish cost 41/8d. to 4½d. a pound (5½-6 annas a sher), a price double the price of good beef and a quarter to a half more than the price of good mutton; and even at this price the supply of fish is uncertain and scanty. If the gaurami or Osphromenus olfax and some other non-predatory fish were introduced, the outlay would be trivial and the produce would find a ready market. But the outturn of water is limited in the same degree as the yield of land, and, to make it pay, fish-rearing would have to be conducted in a careful and systematic manner.

According to Dr. Day, between eighty and ninety species of fish are known to be more or less common throughout the fresh waters of India. These may occur, though it does not follow that, all do occur, in the rivers and ponds of the Deccan. Of the eighty or ninety species only between thirty and forty are more than twelve inches long. The rest are chiefly species of small size, though almost all are valued by the people as food.

A collection recently made for the International Fisheries Exhibition in London included forty-four species. These were, Ambassis nama gande-chiri, Gobius giuris kharpa, Mastacembelus armatus vambat or bam, Ophiocephalus striatus dakhu, O. leuco-punctatus or O. marulius maral, Channa orientalis (?), Macrones seenghala shinghala or shengal, Macrones corsula ? kala shengul, Macrones cavasius shingata,

Rita pavimentata *qhoqra*, Rita hastata *kurdu*, Pseudeutropius taakree vaidi or vayadi, Callichrous bimaculatus quqli, Callichrous malabaricus kala quqli, Wallago attu *shivada* or *pari,* Bagarius varrelli [Grows to an enormous size. The writer has lately stuffed two of 93½ and 60 pounds respectively.] mulanda or tharota, Belone cancila kutra, Discognathus lamta malavya, Lepidocephalicthys thermalis chikani or mura, Nemacheilus sinuatus, N. aureus or N. botia teli mura, N. savona mura, Nemacheilus? mura or sonda, Labeo fimbriatus tambda, L. calbasu kanoshi, L. potail *royadi* or *tambti*, L. boggut *sande*, L. nakta nakta, or nakta shendoa, L. ariza or kawrus kavdasha, Labeo? (unidentified), Cirrhina fulungee *Ioli*, Rasbora daniconius *dandvan*, Barbus sarana kudali or pitule, Barbus dabsoni pangat, Barbus jerdoni? khadchi or masla, B.? khudra, B. parrah kudali, B. kolus Koolis or kolashi, B. ambassis bhondgi, B. ticto. bhondgi, Rohtee cotio or alfrediana gud-dani, R. vigorsii phek, Chela clupeodies alkut, Notopterus kapirat chalat or chambari, and Anguilla beugalensis ahir. [The writer is not absolutely certain of the accuracy of his identification in all cases

The European fisherman may get fair sport if he uses light but strong tackle. *Moral, shengal, gugli, pari,* and *khadchi* all freely take the spoon or natural fish-bait.

Maral and shengal have been killed up to 14 pounds weight; pari up to 21 pounds; khadchi to 14 pounds; and the qugli, though seldom over 15 inches in length, are exceedingly voracious and relieve the tedium of waiting for bigger fish. These five kinds of fish abound in almost all large river pools, whose rocky sanctuaries or retreats cannot be thoroughly netted and it is near these rocky parts that the best sport is usually found. They can be caught by spinning from the bank, but it is far better sport to troll for them from a boat. In Lake Fife at Khadakvasla khadchi and pari have been killed by trolling with the spoon and natural bait. With khadchi the best sport is gained by spinning with natural bait in the rapids when the water is clear during long breaks in the rainy months and during the cold weather. The khadchi is commonly called mahasir by Europeans. This is not the celebrated mahasir Barbus for Still it has very much the habits of the true mahasir and gives splendid sport being very powerful and very game. According to The Rod in India, whose thoroughly sound hints no fisher can do better than study and follow, the Labeo affords capital bottom fishing, and, as Labeos abound in the Poona rivers, good sport should be obtainable by those who are adepts in this style of angling.

At Dev, on the Indrayani, some fifteen miles north-east of Poona, there is a celebrated sacred doh or pool containing a vast number of exceedingly large khadchi The writer has been unable to detect any difference between these fish and those, also called by the natives khadchi, which he has killed in other waters, excepting regards their habits and food. The priest prevents natives from netting the pool, but does not forbid Europeans to fish for sport. Specimens of 38 pounds weight have been caught by Europeans, and there is no doubt that some fish in the pool are double this size. If, as seems probable, these Dev khadchis are the same species as those caught at other places with spoon and natural boat, they must be a degenerate or educated race, for they no longer delight in the rapid waters in which our wrongly called mahasir is generally found nor will they take live or imitation baits. For ages they we been fed by the priests of the shrine on the river-bank on groundnuts Hypogoea arachis, until, unlike other members of the Barbus tribe, they have become strict vegetarians. Of numbers which have been captured and dissected, not one has been found with a trace of any food but groundnuts,, white grain, berries, grass, and water-weeds; while specimens, it is believed of the same species in other pools on the same and other rivers in the district, have been found to have fed chiefly on animal life, fish, insects, grubs, worms, and snails. During the heat of the day it is a wonderful sight to see the khadchis sailing about the Dev pool in large shoals, with their fins above the surface, like so many sharks. The bait for them is the groundnut, and they want fine but very strong hooks and tackle. A handful of groundnuts will soon collect a shoal, and, when the water boils with their rises, the baited hook should be thrown into the midst of the shoal. In the early part of the season, in October soon after the rains are over, when there may be some wild or imperfectly educated fish in the pool, and if the pool has not been over-fished, several runs may be obtained in the course of a day. But, as a rule, the fish are so shy and cunning that after the first run the fisherman may put up his tackle and leave the pool, for he will get no more sport, if this style of fishing may be dignified with the name of sport.

Good sport may be had with small fish in the rapids which usually join the river pools, especially if the rapids have been baited. A rapid is baited by sending a man to spend a couple of days in casting into the heads of several runs or rapids parched gram, groundnuts, and balls of a paste made of clay, bran, rice, and gram. This brings the fish to feed and the sportsman may begin fishing with gram thrown as a fly, spinning with a small bright spoon, or ordinary fly-fishing using small salmon flies. When the fish of one run have become shy the fisher should move to another.

Of the medicinal qualities of the *ahir*, Anguilla bengalensis, the local Bhois have the following belief: "On a Saturday the impotent man should strip himself naked and grind black gram. With the flour of the black gram he should bait a hook, and when he catches an *ahir*, he should put it into a broad basin of water in which it can swim. He should then rub red-lead or *shendur* on the *ahir's* head; and, taking it in his hand, say to it: Oh fish I am changing my state for yours in taking this slimy *balas* from your skin. Please accept my offering. He should then remove the *balas*, and, when it is dry roll it into pills, which when eaten will restore his manly power.'

Another of the Poona Bhois' fish-tales is that a fish called *vavas* lives at Rahu Pimpalgaon. In shape the *vavas* is said to be circular like a wheel. It is believed that while Sita, the wife of Ram, was bathing in the river the *vavas* bit a piece out of the calf of her leg. This, say the Bhois, is proved because if you examine the palate of the fish you will always find a ball of butter. To the question why flesh should turn to butter there is the ready reply, ' It is a miracle and must be accepted'!

POPULATION

Census Details 1872-1881.

ACCORDING to the 1881 census the population of the district was 900,621 or 168.43 to the square mile. Of these, Hindus numbered 846,781 or 94.02 per cent; Musalmans 42,036 or 4.66 per cent; Christians 9500 or 1.05 per cent; Parses 1574 or 0.17 per cent;) Jews 619 or 0.06 per cent; Chinese 78; Sikhs 30; and Unitarians 3.The percentage of males on the total population was 50.53 and of females 49.46. The corresponding returns for 1872 were a total of 921,353 or 180.69 to the square mile, of whom Hindus numbered 870,273 or 94.45 per cent; Musalmans 41,764 or 4.53 per cent; Christians 7415; Parsis 1286; Jews 504; and Others 111. Compared; with the 1872 returns the 1881 returns show a decrease of 20,732 or 2.25 per cent. This decrease is partly due to the famine of 1876-77 and partly to the readiness with which the people of Poona leave their homes in search of employment.

Birth-place.

Of 900,621 (males 455,101, females 445,520), the total population, 799,381 (males 402,414, females 396,967) or 88.75 per cent were

born in the district. Of the 101,240, who were not born in the district, 22,232 were born in Satara; 15,184 in Ahmadnagar; 10,552 in Sholapur; 10,317 in the Kanarese districts; 7485 in the Konkan districts; 4967 in Gujarat; 3744 in Bombay; 3359 in Nasik; 1690 is Khandesh; 1585 in Goa, Daman, and Diu; 595 in Sind; 15,968 in other parts of India; and 3562 outside of India.

Language.

Of 900,621, the total population, 812,124 (406,908 males, 405,218 females) or 90.17 per cent spoke Marathi. Of the remaining 88,497 persons, 48,254 or 5.35 per cent spoke Hindustani; 12,384 or 1.37per cent spoke Gujarati; 10,776 or 1. 19 per cent spoke Telugu; 6990 or 0.77 per cent spoke Marwari; 5239 or 0.58 per cent spoke English; 2539 or 0.28 per cent spoke Portuguese-Konkani of Goanese; 1013 or 0.11 per cent spoke Tamil; 882 or 0.09 per cent spoke Kanarese; 98 spoke Panjabi; 75 spoke Hindi; 56 spoke Arabic; 55 spoke Burmese; 34 spoke Sindhi; 30 spoke Pashtu; 28 spoke Persian; 23 spoke Chinese; 10 spoke French; 6 spoke German; 2 spoke Baluchi; 2 spoke Greek; and 1 spoke Italian.

The following table gives the number of each religious class according to sex at different ages, with, at each age, the percentage on the total population of the same sex and religion. The columns referring to the total population on it religious distinctions but show the difference of sex:

Age.

POONA POPULATION BY AGE, 1881.

| | | HIN | DUS. | | MUSALMA'NS. | | | | |
|------------------|--------|-------------------------|----------|------------------------------|-------------|-------------------------|----------|--------------------------|--|
| AGE IN YEARS. | | Percentage on Males. | Females. | Percentage on females. | Males | Percentage on Males. | Females. | Percentage of Females | |
| up to | 11,204 | 2.62 | 11,388 | 2.70 | 530 | 2.49 | 536 | 2.57 | |
| 1 to 4 | 44,521 | 10.43 | 48,013 | 11.42 | 2106 | 9.91 | 2176 | 10.45 | |
| 5 to 9 | 62,438 | 14.64 | 58,741 | 13.97 | 2966 | 13.97 | 2871 | 13.79 | |
| 10 to | 53,417 | 12.52 | 43,136 | 10.26 | 2689 | 12.66 | 2251 | 10.81 | |

| 14 Image: color of the | | | | | | | | | | | |
|---|--------|-----------------|-------|--------|-------|------|--------------------------|------|-------|--|--|
| 19 30,873 7.23 29,483 7.01 4452 6.83 1439 6.91 20 to 24 31,127 7.29 36,165 8.60 1605 7.55 1749 8.40 25 to 39,235 9.19 39,350 9.36 1797 8.46 1945 9.34 30 to 34 36,886 8.64 37,640 8.95 1757 8.27 1837 8.82 35 to 28,274 6.62 26,525 6.31 1413 6.65 1238 5.95 40 to 49 40,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 18,899 4.65 22,535 5.36 1338 6.30 1283 6.16 600 4.65 1238 5.95 6.31 4.31 6.65 1238 5.95 6.31 6.30 | 14 | | | | | | | | | | |
| 24 31,127 7.29 36,165 8.60 1605 7.55 1749 8.40 25 to 29 39,235 9.19 39,350 9.36 1797 8.46 1945 9.34 30 to 34,886 8.64 37,640 8.95 1757 8.27 1837 8.82 35 to 28,274 6.62 26,525 6.31 1413 6.65 1238 5.95 40 to 40,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 55 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. 0THERS INCLUDING PARSIS. 0THERS INCLUDING PARSIS. 1 to 4 38 13.10 45 13.67 79 | | 30,873 | 7.23 | 29,483 | 7.01 | 1452 | 6.83 | 1439 | 6.91 | | |
| 29 39,235 9.19 39,350 9.36 1797 8.46 1945 9.34 30 to 34,886 8.64 37,640 8.95 1757 8.27 1837 8.82 35 to 39 28,274 6.62 26,525 6.31 1413 6.65 1238 5.95 40 to 49,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 55 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 <td></td> <td>31,127</td> <td>7.29</td> <td>36,165</td> <td>8.60</td> <td>1605</td> <td>7.55</td> <td>1749</td> <td>8.40</td> | | 31,127 | 7.29 | 36,165 | 8.60 | 1605 | 7.55 | 1749 | 8.40 | | |
| 34 36,886 8.64 37,640 8.95 1757 8.27 1837 8.82 35 to 39 28,274 6.62 26,525 6.31 1413 6.65 1238 5.95 40 to 49 40,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 55 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. 0THERS INCLUDING PARSIS. 0THERS INCLUDING PARSIS. 110,00 <td></td> <td>39,235</td> <td>9.19</td> <td>39,350</td> <td>9.36</td> <td>1797</td> <td>8.46</td> <td>1945</td> <td>9.34</td> | | 39,235 | 9.19 | 39,350 | 9.36 | 1797 | 8.46 | 1945 | 9.34 | | |
| 39 28,274 6.62 26,525 6.31 1413 6.65 1238 5.95 40 to 49 40,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 59 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Jews. OTHERS INCLUDING PARSIS. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 14.13 43 13.07 119 12.33 88 12.22 15 to 20 35 12.06 | | 36,886 | 8.64 | 37,640 | 8.95 | 1757 | 8.27 | 1837 | 8.82 | | |
| 49 40,964 9.60 38,605 9.18 2116 9.96 2059 9.89 50 to 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 59 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 14.13 43 13.07 119 12.33 88 12.22 15 to 20 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 | | 28,274 | 6.62 | 26,525 | 6.31 | 1413 | 6.65 | 1238 | 5.95 | | |
| 54 18,899 4.43 19,791 4.70 1038 4.81 1046 5.02 55 to 59 8787 2.06 8915 2.12 439 2.06 375 1.80 Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Jews. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 14.13 43 13.07 119 12.33 88 12.22 15 to 24 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 < | | 40,964 | 9.60 | 38,605 | 9.18 | 2116 | 9.96 | 2059 | 9.89 | | |
| Above 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 18,899 | 4.43 | 19,791 | 4.70 | 1038 | 4.81 | 1046 | 5.02 | | |
| 60 19,869 4.65 22,535 5.36 1338 6.30 1283 6.16 Total Jews. OTHERS INCLUDING PARSIS. Up to 4 | | 8787 | 2.06 | 8915 | 2.12 | 439 | 2.06 | 375 | 1.80 | | |
| Total Jews. OTHERS INCLUDING PARSIS. Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 19,869 | 4.65 | 22,535 | 5.36 | 1338 | 6.30 | 1283 | 6.16 | | |
| Up to 4 9 3.10 12 3.64 25 2.59 22 3.05 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 426,494 420,287 | | | | | 1,231 | 20, | ,805 | | |
| 4 9 3.10 12 3.64 25 2.39 22 3.03 1 to 4 38 13.10 45 13.67 79 8.18 72 10.00 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | Total | | | | | | OTHERS INCLUDING PARSIS. | | | | |
| 5 to 9 58 20.00 68 20.66 109 11.29 107 14.86 10 to 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | - | 9 | 3.10 | 12 | 3.64 | 25 | 2.59 | 22 | 3.05 | | |
| 10 to 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | 1 to 4 | 38 | 13.10 | 45 | 13.67 | 79 | 8.18 | 72 | 10.00 | | |
| 14 41 14.13 43 13.07 119 12.33 88 12.22 15 to 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | 5 to 9 | 58 | 20.00 | 68 | 20.66 | 109 | 11.29 | 107 | 14.86 | | |
| 19 35 12.06 28 8.51 99 10.25 80 11.11 20 to 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 41 | 14.13 | 43 | 13.07 | 119 | 12.33 | 88 | 12.22 | | |
| 24 11 8.79 20 6.07 89 9.22 55 7.63 25 to 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 35 | 12.06 | 28 | 8.51 | 99 | 10.25 | 80 | 11.11 | | |
| 29 19 6.55 18 5.47 58 6.01 51 7.08 | | 11 | 8.79 | 20 | 6.07 | 89 | 9.22 | 55 | 7.63 | | |
| 30 to 14 4.82 19 5.77 68 7.04 54 7.50 | | 19 | 6.55 | 18 | 5.47 | 58 | 6.01 | 51 | 7.08 | | |
| | 30 to | 14 | 4.82 | 19 | 5.77 | 68 | 7.04 | 54 | 7. 50 | | |

| 34 | | | | | | | | |
|-------------|-----|------|-----|------|-----|-------|-----|------|
| 35 to 39 | 13 | 4.48 | 18 | 5.47 | 68 | 7.04 | 47 | 6.52 |
| 40 to 49 | 18 | 6.20 | 20 | 6.07 | 118 | 12.22 | 61 | 8.47 |
| 50 to 54 | 10 | 8.44 | 10 | 3.03 | 50 | 5.18 | 26 | 3.61 |
| 55 to 59 | 5 | 1.72 | 10 | 8.03 | 25 | 2.59 | 13 | 1.80 |
| Above 60 | 19 | 6.55 | 18 | 5.47 | 58 | 6.01 | 44 | 6.11 |
| Total | 290 | | (7) | 329 | | 965 | 720 | |

continue.

| | | CHRISTIANS. | | | | | | | |
|---------------|-------|-------------------------|----------|--------------------------|--|--|--|--|--|
| AGE IN YEARS. | Males | Percentage on Males. | Females. | Percentage on females | | | | | |
| up to 1 | 132 | 2.15 | 109 | 3.22 | | | | | |
| 1 to 4 | 379 | 6.19 | 394 | 11.66 | | | | | |
| 5 to 9 | 468 | 7.64 | 508 | 15.63 | | | | | |
| 10 to 14 | 378 | 6.17 | 371 | 10.97 | | | | | |
| 15 to 19 | 357 | 5.83 | 307 | 9.08 | | | | | |
| 20 to 24 | 1244 | 20.32 | 318 | 9.41 | | | | | |
| 25 to 29 | 1182 | 19.31 | 362 | 10.71 | | | | | |
| 30 to 34 | 584 | 9.54 | 288 | 8.52 | | | | | |
| 35 to 39 | 405 | 6.61 | 188 | 5.56 | | | | | |
| 40 to 49 | 491 | 8.02 | 270 | 7.99 | | | | | |
| 50 to 54 | 202 | 3.30 | 95 | 2.81 | | | | | |
| 55 to 59 | 117 | 1.91 | 51 | 1.50 | | | | | |
| Above 60 | 182 | 2.97 | 118 | 3.49 | | | | | |

| Total | 61 | 21 | 33 | 79 | |
|----------|--------|-------|-----------|-------|--|
| | | TOTA | AL | | |
| Up to 4 | 11,900 | 2.61 | 12,067 | 2.70 | |
| 1 to 4 | 47,123 | 10.35 | 50,700 | 11.37 | |
| 5 to 9 | 66,039 | 14.51 | 62,295 | 13.98 | |
| 10 to 14 | 56,644 | 12.44 | 45,889 | 10.30 | |
| 15 to 19 | 32,816 | 7.21 | 31,337 | 7.03 | |
| 20 to 24 | 34,076 | 7.48 | 38,307 | 8.59 | |
| 25 to 29 | 42,291 | 9.29 | 41,726 | 9.36 | |
| 30 to 34 | 39,309 | 8.63 | 39,838 | 8.94 | |
| 35 to 39 | 30,173 | 6.63 | 28,016 | 6.28 | |
| 40 to 49 | 43,707 | 9.60 | 41,015 | 9.20 | |
| 50 to 54 | 20,184 | 4.43 | 20,968 | 4.70 | |
| 55 to 59 | 9373 | 2.05 | 9364 | 2.10 | |
| Above 60 | 21,466 | 4.71 | 23,998 | 5.38 | |
| Total | 455 | ,101 | 445,520 | | |

The following table shows the proportion of the people of the district who are unmarried, married, and widowed:

Marriage.

POONA MARRIAGE DETAILS, 1881.

| | HINDUS. | | | | | | | | | |
|------------|---------|----------|----------|----------|----------------------|----------|--|--|--|--|
| | Unde | r Ten. | Ten to F | ourteen. | Fifteen to Nineteen. | | | | | |
| | Males. | Females. | Males. | Females | Males. | Females. | | | | |
| Unmarried. | 116,319 | 109,199 | 45,685 | 15,883 | 16,952 | 1011 | | | | |
| Married | 1746 | 8736 | 7476 | 26,383 | 13,518 | 27,235 | | | | |
| Widowed | 98 207 | | 257 | 770 | 403 | 1237 | | | | |

| | MUSALMANS. | | | | | | | | |
|------------|-------------|------|------|------|------|------|--|--|--|
| Unmarried. | 5553 | 5409 | 2424 | 1351 | 1061 | 112 | | | |
| Married | 45 | 170 | 151 | 872 | 377 | 1288 | | | |
| Widowed | 4 | 4 | 14 | 28 | 14 | 39 | | | |
| | CHRISTIANS. | | | | | | | | |
| Unmarried. | 975 | 1009 | 375 | 360 | 341 | 164 | | | |
| Married | 4 | 2 | 3 | 10 | 16 | 139 | | | |
| Widowed | | 1 | | | | | | | |

continue.

| | | HINDUS. | | | | | | | | | |
|------------|----------------------------|---------|-----------|------------------|---------|----------|--|--|--|--|--|
| | Twenty to Twenty- nine. | | Thirty ar | Thirty and Over. | | tal. | | | | | |
| | Males. | Females | Males. | Females. | Males. | Females. | | | | | |
| Unmarried. | ed. 12,380 828 | | 4764 | 852 | 196,100 | 127,773 | | | | | |
| Married | 55,846 | 68,383 | 131,806 | 88,295 | 210,391 | 219,032 | | | | | |
| Widowed | 2136 6304 | | 17,109 | 64,964 | 20,003 | 73,482 | | | | | |
| | | | MUSA | ALMANS. | | | | | | | |
| Unmarried. | 1146 | 88 | 515 | 123 | 10,799 | 7083 | | | | | |
| Married | 2134 | 3330 | 6557 | 4339 | 9264 | 9999 | | | | | |
| Widowed | 122 | 276 | 1014 | 3376 | 1168 | 3723 | | | | | |
| | | | CHRI: | STIANS. | | | | | | | |
| Unmarried. | 2099 | 93 | 471 | 47 | 4261 | 1673 | | | | | |
| Married | 320 | 557 | 1375 | 656 | 1718 | 1364 | | | | | |
| Widowed | 7 | 30 | 135 | 307 | 142 | 342 | | | | | |

POONA MARRIAGE DETAILS, 1881—continued.

| PARSIS. | |
|---------|--|
|---------|--|

| | Under Ten. | | | n to rteen. | Fifteen to Nineteen. | |
|------------|------------|----------|--------|----------------|-------------------------|----------|
| | Males. | Females. | Males. | Females. | Males. | Females. |
| Unmarried. | 208 | 198 | 108 | 77 | 77 | 35 |
| Married | 2 1 | | 7 | 11 | 21 | 43 |
| Widowed | | | | | | 2 |
| | JEWS. | | | | | |
| Unmarried. | 105 | 124 | 41 | 37 | 29 | 9 |
| Married | | 1 | | 6 | 6 | 19 |
| Widowed | | | | | | |
| | | | OTH | HERS. | | |
| Unmarried. | 3 | 2 | 3 | | 7 | |
| Harried | | | 1 | | | |
| Widowed | | | | | | |

continue.

| | | | PAR | SIS. | | | |
|------------|------------------------|----------|----------|-------------|--------|----------|--|
| | Twenty to Twenty-nine. | | Thirty a | nd Over. To | | otal. | |
| | Males. | Females. | Males. | Females. | Miles. | Females. | |
| Unmarried. | 57 | 7 | 13 | 1 | 443 | 318 | |
| Married | 70 | 92 | 251 | 169 | 360 | 316 | |
| Widowed | 1 | 4 | 37 | 73 | 38 | 79 | |
| | | | JE\ | WS. | | | |
| Unmarried. | 7 | 2 | 4 | | 186 | 172 | |
| Married | 21 33 | | 66 | 60 | 93 | 119 | |
| Widowed | 2 | 3 | 9 | 35 | 11 | 38 | |

| | OTHERS. | | | | | |
|------------|---------|---|----|---|----|---|
| Unmarried. | 6 | | 10 | | 29 | 2 |
| Harried | 4 | 3 | 66 | 2 | 71 | 5 |
| Widowed | | | 4 | | 4 | |

Occupation.

According to Occupation the 1881 census returns divide the population into six classes:

- I.-In Government service, learned professions, literature, and arts, 28,026 or 3.11 per cent.
- II.-In Domestic service, 14,261 or 1.58 per cent.
- III.-In Trade, 9141 or 1.01 per cent.
- IV.-In Agriculture, 293,364 or 32.57 per cent.
- V.-In Crafts, 67,271 or 7.46 per cent.
- VI.- In Indefinite and Unproductive occupations, including children, 488,558 or 54.24 per cent.

BRAHMANS

Bra'hmans, [Hindu caste details are from materials collected by Mr. K. Raghunathji by personal local inquiry and from information supplied by Mr. M. M. Kunte.] according to the 1881 census, included fifteen classes with a strength of 49,039 or 5.80 per cent of the Hindu population. The following statement shows the divisions and the strength of Poona Brahmans:

POONA BRAHMANS, 1881.

| DIVISION. | Males. | Females | Total. | DIVISION. | Males. | Females | Total. |
|-----------|--------|---------|--------|-----------|--------|---------|--------|
| Chitpavan | 6010 | 5574 | 11,584 | Kast | 93 | 85 | 178 |
| Deshasth | 16,758 | 15,991 | 32,749 | Marvadi | 140 | 59 | 199 |
| Devrukhe | 96 | 79 | 175 | Shenvi | 266 | 179 | 445 |

| Dravid | 15 | 22 | 87 | Tailang | 67 | 33 | 100 |
|-----------|-----|-----|------|---------|--------|--------|--------|
| Govardhan | 315 | 289 | 604 | Tirgul | 169 | 131 | 300 |
| Gujarati | 218 | 64 | 282 | Vidur | 51 | 49 | 100 |
| Javal | 9 | 2 | 11 | | | | |
| Kanoj | 463 | 236 | 699 | Total | 25,511 | 23,528 | 49,039 |
| Karhade | 841 | 735 | 1576 | | | | |

CHITPAVANS.

Chitpa'vans [This account of the Chitpavans has the approval of Rao Bahadur Gopalrao Hari Deshmukh.] from the fact that the Peshwa belonged to their tribe are historically the most important of Poona Brahmans. They are returned as numbering about 11,600 and as found over the whole district. Besides Chitpavans they are called Chitpols and Chiplunas. Of these names Chitpavan is said to mean either pure from the pyre chita or pure of heart chith, and Chitpol is said to mean heart-burners. It seems probable that these names, like the third name Chiplunas, come from the town of Chiplun in Ratnagiri, their chief and original settlement whose old name is said to have been Chitpolan. [Sahyadri Khand, I. 2.] Since 1715, when Peshwa Balaji Vishvanath rose to be the chief man in the Maratha state, the Chitpavans have also been known as Konkanasths, that is the chief Konkan Brahmans. Their worship of Parashuram, the slayer of the Kshatriyas and the coloniser of the Konkan, on Parashuram hill close to Chiplun, the fact that they are called *Parashuram srishti* or Parashuram's creation, and the meaning pure from the pyre which the sound of their name suggests, to some extent explain the curious legends of which they are the subjects. According to the Sahyadri Khand, Parashuram was so defiled by the slaughter of the Kshatriyas that Brahmans refused to perform any ceremonies for him. At that time the bodies of fourteen shipwrecked foreigners happened to be cast ashore by the sea which then washed the foot of the Sahyadri hills. These corpses Parashuram purified by burning them on a funeral pyre or chita, restored them to life, taught them Brahman rites, and made them perform ceremonies to free him from blood-quiltiness. Parashuram wished to reward his new priests, and as the Deccan had already been given to Brahmans he prayed the sea to spare him some of his domain. The sea agreed to retire as far west as Parashuram could shoot an arrow from the crest of the Sahyadris. The arrow was shot and reclaimed a belt of land about thirty miles broad. The banks of the Vashishthi, about forty miles north of Ratnagiri, were set apart

for the new Brahmans, and in memory of the process by which they had been purified they were called Chitpavans and their settlement Chitpolan. After establishing this colony Parashuram retired to Gokarn in North Kanara. Before leaving he told the Brahmans, if they were ever in trouble, to call on him, and he would come to their aid. After a time, fearing that they might be forgotten, one of the Brahmans feigned death and the rest called on their patron to come to their help. Parashuram appeared, and, disgusted with their deceit and their want of faith, told them that they would lose the power of meeting in council and would become servile. Accordingly they are said to have married Shudra women and become degraded. [Another account states that Chitpavans were not foreigners but Bhois or local fishermen. Taylor's Oriental Manuscripts, III. 705. This legend, with slight variations, has been often quoted. The chief references are, Moore's Hindu Pantheon, 351 Wilks' History of the South of India, I 157-158; Grant Duffs Marathas, I. 8 Ancient Remains of Western India, 12; Burton's Goa and the Blue Mountains, 14-15 Asiatic Researches, IX. 239; and Journal Royal Asiatic Society Bombay, XVII. 37 (1853) and V. 1865.] The historic value of this legend is hard to estimate. The writer of the Sahyadri Khand was hostile to other local Brahmans as well as to the Chitpavans. He dishonours the Karhade Brahmans by a story that they are descended from the bones of a camel which was raised to life by Parashuram. This story, probably, arose from a play on the words *khar* an ass and had a bone. The explanation has nothing to do with the Karhades who are almost certainly a Deccan tribe who take their name from the town of Karhad in Satara, at the sacred meeting of the Koina and Krishna rivers. As the two stories are so similar it seems probable that the Chitpavans were called after the old settlement of Chitpolan, and that the resemblance of that word to *chita* a pyre suggested some parts of the legend. At the same time it seems probable that the Chitpavans did not, like the bulk of Konkan Brahmans, enter the Konkan by land. Their fair complexion, the extent to which they use the Konkan dialect in their homes, and the legend of their arrival as shipwrecked sailors seem to show that they came into the South Konkan from, beyond the sea. Whether they were foreigners is doubtful. [Wilford (Asiatic Researches, IX, 239) thought that the Chitpavans were Persian descended from the sons of Khosru Parviz,] The legend of the shipwrecked sailors being foreigners or *mlenchhas* is, to some extent supported by the low position which the Chitpavans formerly held among Brahmans, and by the commonness among them of light or gray eyes. The Chitpavans have a tradition that they came from Amba Jogai in the Nizam's country about 100 miles north of Sholapur. They say that they were originally Deshasths, and that fourteen Brahmans of different family-stocks accompanied Parashuram to the Konkan and settled at Chiplun. These fourteen family-stocks belonged to two branches or *shakhas*, Shakala and Titiriya. The *sutra* or ritual of the Shakala branch is that composed. by the seer Ashvalayan and of the Titiriya branch is that of the seer Hiranyakeshi. They pay homage to the goddess Jogai or Yogeshvari of Amba, and, wherever they are settled, build a temple in her honour. At Poona there are two temples to Yogeshvari, one red and the other black. Among Chitpavans Yogeshvari takes the next place to Ganpati. Before marriage and other ceremonies they go to her temple with music and ask her to come and be with them during the ceremony. [Rao Bahadur Gopalrao Hari Deshmukh.]

Until the rise of Balaji Vishvanath Peshwa, who belonged to their class, the Chitpavans held a low position and were known chiefly as spies or harkaras. Even after several generations of power and wealth, with strict attention to Brahman rules, the purer classes of Brahmans refused to eat with them, and it is said that when Bajirav, the last Peshwa (1796-1818), was at Nasik he was not allowed to go down to the water by the same flight of steps as the priests. [Hamilton's Description of Hindustan, II 197; Grant Duffs Marathas, I. 8; Wilks (History of the South of India, I. 157-158) says that when he wrote (about 1880) the Brahmans of other parts of India denied that the Konkanasths were Brahmans. In their predatory incursions the Konkanasths are said to have greedily sought for copies of the Sahyadri Khand and destroyed them. Grant Duff (Marathas, I. 8) mentions that a few years before the Peshwa a overthrow a respectable Brahman of Vai in Satara was degraded because he had a copy of the Sahyadri Khand.] Whatever disqualifications may in theory attach to the Chitpavans, their present social and religious position is as high as that of the Karhade or any other branch of Deccan Brahmans.

Chitpavans have no subdivisions. All eat together and intermarry except families who have the same or an akin family-stock. [The akin gotras or family-stocks are Bharadvaj. Gargya, and Kapi; Jamadagnya and Vatsa Kashyap and Shandilya; Kaundinya and Vashishtha; Kaushik and Babhravya; Nityunjan and Vishnuvriddha; Atri alone has no kin: hence the saying Atri ani sarvanshi maitri, a person of the Atri family-stock can be joined to a person of any other family-stock. Besides surnames and family-stocks, there are pravars or founders' names whish are subdivisions of family-stocks. Thus the Shandilya stock has three pravars, Shandilya, Asit, and Deval, and other family-stocks include three or five founders' names. In marriage the boy and girl should, on the father's side, be of different founders' names and of

different family-stocks.] Among the common surnames or adnavs are Abhyankar, Agashe, Athavle, Bal, Bapat, Bhaqvat, Bhat, Bhave, Bhide, Chitale, Damle, Dugle, Gadgil, Gadre, Jog, Joshi, Karve, Kunthe, Lele, Limaye, Londhe, Mehendale, Modak, Nene, Ok, Patvardhan, Phadke, Ranade, Sathe, Vyas. The names of some of their family-stocks or gotras are Atri, Babhravya, Bharadvaj, Gargya, Jamadagnya, Kapi, Kashyap, Kaundinya, Kaushik, Nityunjan, Shandilya, Vashistha, Vatsa, and Vishnuvriddha. Many families, though settled for generations in the Deccan still call themselves Konkanasths and differ considerably from Deshasths. Many of them can be recognized by their gray or cat eyes, their fair skin, and their fine features. The Poona Chitpavan speaks pure Marathi. As many of the owners are rich and most are well-to-do, Chitpavan houses are generally comfortable and well kept. The house is generally built round a central plot or yard and is entered through a gateway or passage in one of the outer faces of the building. From the inner court a few steps lead to the veranda or oti, for the house is always raised on a plinth or *jote* three or four feet high. In the veranda strangers are received, boys and girls play, a clerk or agent spreads his account-books, or the women of the house swing and talk. The ground floor has four to seven rooms, a centre hall, a back veranda, and the second storey has four rooms and two great halls; the walls are of brick and mortar and the roof is tiled. The woodwork is either of teak or of common timber. A rich house costs £500 to £1000 (Rs. 5000-10,000) to build, a middle-class house £200 to £800 (Rs. 2000-3000), and a poor house £30 to £50 (Rs. 300-500).

The furniture in a rich man's house is worth about £400 (Rs. 4000), in a middle-class house about £90 (Rs. 900), and in a poor house about £16 (Rs. 160). [The details are:

Chitpavan, Furniture.

| ADTICLE | RI | CH. | MIC | DLE. | | POOR. | |
|-------------------------|-----|-------|-----|-------|-----|-------|--|
| ARTICLE. | No. | Cost. | No. | Cost. | No. | Cost. | |
| | F | Rs. | F | Rs. | F | a. | |
| Gloss Hanging Lamps. | 10 | 200 | 4 | 4 75 | | | |
| Chairs. | 12 | 50 | 2 | 8 | | | |
| Benches. | 2 | 10 | 1 | 5 | | | |

| Cots. | 2 | 100 | 2 | 50 | 1 | 5 | 0 |
|-------------------------|-----|------|----|-----|----|-----|---|
| Boxes. | 10 | 200 | 2 | 40 | 1 | 15 | 0 |
| Swinging Cots | 2 | 100 | 1 | 20 | 1 | 10 | 0 |
| Cradles | 3 | 90 | 1 | 10 | 1 | 5 | 0 |
| High Wooden Stools | 2 | 20 | 1 | 5 | | | |
| Low Wooden Stools | 12 | 40 | 5 | 15 | 2 | 8 | 0 |
| Carpets | 2 | 200 | 1 | 50 | | | |
| Bedding | 10 | 200 | 3 | 80 | 1 | 8 | 0 |
| Blankets | 5 | 50 | 2 | 10 | 2 | 5 | 0 |
| Coverlets | 10 | 20 | 3 | 6 | 2 | 3 | 0 |
| Metal Pots | 150 | 900 | 50 | 250 | 20 | 40 | 0 |
| Brass Lamps | 10 | 80 | 5 | 25 | 2 | 8 | 0 |
| Wooden Lamps | 2 | 25 | 2 | 10 | 2 | 5 | 8 |
| Silver Vessels | 30 | 500 | 10 | 100 | | | |
| Worship Vessels | 20 | 300 | 15 | 150 | 5 | 40 | 0 |
| Handmills | 2 | 25 | 1 | 10 | | | |
| Grindstones and Pins | 4 | 20 | 2 | 8 | 1 | 3 | 0 |
| Mortars and Pestles | 3 | 15 | 2 | 10 | 1 | 4 | 0 |
| Earthen Pots | 5 | 10 | 10 | 5 | 15 | 3 | 0 |
| Carriages | 2 | 1000 | | | | | |
| Total | | 4155 | | 892 | | 162 | 8 |

Beside the articles mentioned in the above list, a well-to-do man was a pair of mirrors, one or two tables, four or five sofas, and a few cups and dishes for tea services Of late young educated men have begun to furnish their houses in European style.] Few families have a large enough store of cooking and eating vessels to entertain the whole company of guests. called to a caste-dinner or *Brahman-bhojan*.

In rich and well-to-do Chitpavan families soon after harvest either in November-December or in April-May a year's supply of the different kinds of grain is bought and kept in a store-room or kothi. Stores of oil and of fuel are also laid in. From day to day little is bought in the market except vegetables and fruit The daily purchases in rich families are made by a Brahman man-servant, and in middle and poor families by the head of the house or by grown sons. The women of the family never go to the market to buy vegetables or fruit. The daily supply of milk cornel in most cases from the family cows and buffaloes; in some cases it is bought from a milkman. The dairy is entrusted to the women of the family, and in rich houses to Brahman servants. Most of the grain, chiefly rice, wheat, millet, and pulse, is ground daily by Kunbi servants. Except at certain religious ceremonies which very rarely take place, a Konkanasth should eat no flesh and drink no liquor. Their every-day food is rice, millet or wheal bread, pulse, vegetables, oil, whey, milk, and curds. Their drink is water, milk, and sometimes tea and coffee. Spirituous liquor if forbidden by caste rules, but its use, especially the use of European spirits, has of late years become commoner among the more educated. They take two meals a day, one between nine and eleven in the morning, the other between seven and nine in the evening. Men and women eat separately, the women after the men have done children take a meal early in the morning and again in separate dishes with the father or mother; after he has been girt with the sacred thread a boy follows the same rules as a man. The head of the house, his sons, and quests of superior rank sit on low wooden stools in a row, and in a second row facing them are quests or male relations of inferior rank. Metal or leaf plates are laid in front of each stool and to the right-hand side is a water-pot or tambya and to the left n cup with a ladle in it. On the top to the right are cups for curries and relishes. The pulse and grain are served by a Brahman cook, and the vegetables and butter by one of the women of the family, generally the host's wife or his daughter-in-law. The dinner is served in three courses, the first of boiled rice and pulse and a spoonful or two of butter, the second of wheat bread and sugar and butter with salads and curries, and the third of boiled rice with curds and salads. With each course two or three vegetables are served. The plate is not changed during dinner. In each course the chief dish is heaped in the centre of the plate; on the right the vegetables are arranged, and on the left the salads with a piece of lemon and some salt. In rich families the chief dishes are served by a Brahman servant, and the salads by one of the women of the family, generally by the host's wife or his daughter-in-law. Except on a few holidays and by a few strict elders the rule of silence at meals is not kept. The dinner lasts about half an hour. After dinner a few chew a basil leaf and sip a

little water, others chew betelnut or a packet of betelnut and leaves. The ordinary monthly food charges of a household of six persons, a man and wife two children and two relations or dependants, vary for a rich family from £6 to £9 (Rs. 60-90); for a middle class family from £4 to £6 (Rs. 40-60); and for a poor family from £110s. to £2 (Rs. 15-20). [The details are:

Chitpavan Food Charges.

| | | RI | CH. | | | MID | DLE. | | | PO | OR. | |
|----------------------|-----|----|-----|----|-----|-----|------|----|-----|----|-----|----|
| ARTICLE. | Fro | m | Т | o | Fro | m | Т | o | Fro | om | Т | ō |
| | Rs. | a. | Rs. | a. | Rs. | a. | Rs | a. | Rs. | a. | Rs. | a. |
| Rice | 10 | 0 | 12 | 0 | 10 | 0 | 12 | 0 | 7 | 0 | 8 | 0 |
| Split Pulse | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 8 | 0 | 2 | 0 | 8 |
| Wheat | 4 | 0 | 6 | 0 | 2 | 0 | 3 | 0 | | | | |
| Millet Bread | | | | | 2 | 0 | 3 | | 1 | 8 | 2 | 0 |
| Pulse | 3 | 0 | 5 | 0 | 2 | 0 | 2 | 8 | 0 | 12 | 1 | 0 |
| Butter | 10 | 0 | 12 | 0 | 3 | 0 | 4 | 0 | 0 | 8 | 1 | 0 |
| Oil, Sweet | 6 | 0 | 7 | 0 | 2 | 8 | 4 | 0 | 0 | 8 | 0 | 12 |
| Oil, Bitter | 1 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 0 | 12 | 1 | 0 |
| Vegetables | 4 | 0 | 5 | 0 | 2 | 0 | 2 | 8 | 0 | 4 | 0 | 8 |
| Sugar | 5 | 0 | 7 | 0 | 2 | 0 | 2 | 8 | 0 | 2 | 0 | 4 |
| Molasses | 3 | 0 | 5 | 0 | 2 | 0 | 3 | 0 | 0 | 4 | 0 | 8 |
| Milk | 8 | 0 | 10 | 0 | 5 | 0 | 7 | 0 | 1 | 0 | 2 | 0 |
| Coffee | 1 | 0 | 2 | 0 | 0 | 8 | 0 | 1 | | | | |
| Tea | 0 | 8 | 0 | 12 | | | | | | | | |
| Firewood | 7 | 0 | 9 | 0 | 5 | 0 | 6 | 0 | 3 | 0 | 4 | 0 |
| Tobacco and Betel | 2 | 0 | 4 | 0 | 1 | 0 | 1 | 2 | 0 | 4 | 0 | 8 |
| Buttermilk and Curds | | | | | | | | | 0 | 8 | 0 | 12 |

| Total 65 8 88 12 43 0 56 14 18 8 22 |
|-------------------------------------|
|-------------------------------------|

The money outlay of a begging or *bhikshuk* Brahman who receives constant presents of grain and clothes is much less than the sum named in the text.]

Dress.

Indoors a rich Chitpavan wears a waistcoat, a silk-bordered waistcloth, and either leaves his feet bare or walks on wooden clogs or pattens. At dinner and when worshipping his house gods he wears a silk waistcloth and pats on a fresh waistcloth at bed time. In cold weather he rolls a shawl round his head and puts on a flannel waistcoat. Out of doors he wears a big round flat-rimmed turban generally with a belt of gold on the front of the outmost fold and a low central peak covered with gold. The usual colours are white, red, crimson, and purple. He wears a short cotton or broad- cloth coat, a double-breasted twelve-knotted or barabandi waist-coat, a shouldercloth, and on his feet square-toed red shoes. His waistcloth and shouldercloth are daily washed at home. His full or ceremonial dress is the same as his every-day dress. The English speakers, or B.A's as they are called, wear small neatly folded turbans, English-cut shirts and broadcloth coats, coloured stockings, and English boots and shoes, and in a few cases loose trousers. Of ornaments, a rich man wears a pearl or gold necklace, a diamond or gold finger ring, sometimes a pair of bracelets round the right or left wrist, and a pearl earring. Old men wear a necklace of gold with pearls, coral, and rudraksh or rosary beads. Except that it is cheaper, a middle-class man's dress does not differ from a rich man's dress. On ceremonial and other full-dress occasions a poor Brahman generally wears a turban, a shouldercloth, and a coat. A rich man's wardrobe and ornaments are worth about £320 to £580 (Rs. 3200-5800), a middle class Brahman's £50 to £85 (Rs. 500-850), and a poor Brahman's £1 to £3 (Rs.10-30). The details are:

Brahman Man's Dress and Ornaments.

| Auticlo | | R | ICH | l. | | | M] | IDDI | LE. | | | I | 200 | R | |
|----------|-----|------|-----|-----|----|-----|------|------|-----|----|----------|-----|-----|-----|----|
| Article. | No. | Fror | n | То | | No. | From | | То | | No. From | | То | | |
| Dress. | | Rs | a. | Rs. | a. | | Rs. | a. | Rs. | a. | | Rs. | a. | Rs. | a. |

| Turbans | 4 | 75 | 0 | 100 | 0 | 2 | 30 | 0 | 50 | 0 | 1 | 2 | 0 | 10 | 0 |
|--|---|------|---|------|---|---|----|----|----|---|---|---|----|----|----|
| Waistcoats, Broadcloth | 4 | 3 | 0 | 7 | 0 | 2 | 3 | 0 | 4 | 0 | | | | | |
| Waistcoats, Twelve- knotted | 4 | 2 | 0 | 3 | 0 | 2 | 1 | 0 | 1 | 8 | 1 | 0 | 4 | 0 | 10 |
| Coats, Broadcloth | 2 | 10 | 0 | 20 | 0 | 1 | 5 | 0 | 10 | 0 | | | | | |
| Coats, Cotton | 4 | 5 | 0 | 7 | 0 | 3 | 4 | 0 | 5 | 0 | | 0 | 8 | 1 | 0 |
| Coats Cotton | 2 | 2 | 0 | 2 | 8 | 2 | 2 | 0 | 2 | 8 | 1 | 1 | 0 | 1 | 4 |
| Jacket, s <i>adare</i> | 4 | 2 | 0 | 4 | 0 | 2 | 2 | 0 | 2 | 8 | | | | | |
| Waistcloths, silk | 2 | 15 | 0 | 25 | 0 | 1 | 10 | 0 | 15 | 0 | 1 | 1 | 8 | 2 | 8 |
| Waistcoats, Cotton | 3 | 5 | 0 | 7 | 0 | 2 | 4 | 0 | 5 | 0 | 1 | 1 | 8 | 2 | 8 |
| Sash, dupeta | 2 | 25 | 0 | 100 | 0 | 1 | 15 | 0 | 50 | 0 | | | | | |
| Shouldercloth, uparna, Gold-edged. | 1 | 15 | 0 | 20 | 0 | | | | | | | | | | |
| Shouldercloth, Silk-edged Cotton. | 2 | 6 | 0 | 10 | 0 | 1 | 5 | 0 | 7 | 0 | | | | | |
| Shouldercloth, Plain edged Cotton. | | | | | | 2 | 2 | 8 | 4 | 0 | 1 | 0 | 15 | 2 | 4 |
| Shoes | 2 | 2 | 0 | 3 | 0 | 1 | 0 | 12 | 1 | 0 | 1 | 0 | 10 | 0 | 12 |
| Handkerchiefs | 4 | 2 | 0 | 2 | 8 | 2 | 1 | 0 | 1 | 8 | | | | | |
| Walking Stick | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 8 | 1 | 0 | | | | | |
| Umbrella | 2 | 3 | 0 | 4 | 0 | 2 | 2 | 0 | 3 | 0 | 1 | 0 | 8 | 0 | 18 |
| Ornaments, | | | | | | | | | | | | | | | |
| Necklace, Diamond | 1 | 1000 | 0 | 1500 | 0 | | | | | | | | | | |
| Necklace, Pearls | 1 | 1000 | 0 | 1500 | 0 | | | | | | | | | | |

| Necklace, Gold | 1 | 200 | 0 | 500 | 0 | 1 | 100 | 0 | 200 | 0 | | | | |
|---------------------------------|---|------|---|------|---|---|-----|----|-----|---|-------|----|----|----|
| Necklace, Gold | 1 | 200 | 0 | 400 | 0 | 1 | 100 | 0 | 150 | 0 | | | | |
| Necklace, Gold <i>sakali</i> | 3 | 200 | 0 | 400 | 0 | 2 | 100 | 0 | 200 | 0 | | | | |
| Armlets, Gold pochi | 1 | 30 | 0 | 40 | 0 | 1 | 15 | 0 | 25 | 0 | | | | |
| Diamond Ring, <i>angathi</i> | 1 | 100 | 0 | 1000 | 0 | 1 | 20 | 0 | 50 | 0 | | | | |
| Gold Ring | 2 | 50 | 0 | 100 | 0 | 2 | 30 | 0 | 40 | 0 | | | | |
| Gold Ring Pavitrak | 1 | 20 | 0 | 30 | 0 | 1 | 20 | 0 | 80 | 0 | | | | |
| Total | | 3173 | 0 | 5787 | 0 | I | 472 | 12 | 858 | 0 | 8 | 13 | 21 | 10 |

1

The indoor and outdoor dress of a rich Brahman woman is a robe and bodice of cotton and silk. The robe is twenty-four to thirty-two feet long and three to four feet broad. It is passed round the waist so as to divide it into two parts of unequal length, the longer part being left to fall as a skirt and the shorter part being drawn over the shoulders and bosom. In arranging the lower half of the robe the corner of the skirt is passed back between the feet and tucked into the waist behind leaving in front two gracefully drooping folds of cloth which hide the limbs to below the knee nearly to the ankle. The upper part is drawn backwards over the right shoulder and the end is passed across the bosom and fastened into the left side of the waist. When going out the skirt of the robe is drawn tightly over the head, and the end is held in the right hand about the level of the waist. The bodice is carefully made so as to fit the chest tightly and support the breast, the ends being tied in a knot in front under the bosom. It covers the back to below the shoulder-blade, and the sleeves, which are tight, come within about an inch of the elbow. The right sleeve which is covered by the robe is plain, but, except among the poorest, the fringe of the left sleeve is highly ornamented with gold and embroidery. On marriage and other great occasions a rich woman draws a shawl over the back part of her head and holds the ends in front one in each hand at about the level of the lower part of the bodice. Her indoor jewelry includes head, ear, nose, neck, arm, and toe rings. Though she may not have a specimen

of every form of ornament, a rich woman has a large stock of jewelry worth £170 to £750 (Rs. 1700 - 7500). Except that her ornaments are fewer and that her outdoor dress is less costly, a middle-class woman's dress is nearly the same as a rich woman's. A poor woman has few and light jewels and a small store of clothes. The value of a rich woman's wardrobe varies from £50 to £120 (Rs. 500-1200); of a middle class woman's from £15 to £30 (Rs. 150 - 300), and of a poor woman's from £2 to £4 (Rs. 20 - 40). [The details are:

Brahman Woman's Clothes.

| | RICH. | | | | | | MIC | DI | LE. | | | PC | OOR | ١. | |
|----------------------------|-------|-----|----|-----|----|-----|-----|----|-----|----|-----|-----|-----|-----|----|
| ARTICLE. | No. | Fro | m | То | | No. | Fro | m | То |) | No. | Fro | om | To | 0 |
| | | Rs. | a. | Rs. | a. | | Rs. | a. | Rs. | a. | | Rs. | a. | Rs. | a. |
| Bodice, choli | 10 | 10 | 0 | 15 | 0 | 6 | 3 | 0 | 4 | 0 | 3 | 0 | 12 | 1 | 0 |
| Bodice, choli | 2 | 10 | 0 | 20 | 0 | 1 | 5 | 0 | 10 | 0 | 1 | 1 | 8 | 4 | 0 |
| Bodice, choli | | | | 1 | | 4 | 2 | 0 | 2 | 8 | 3 | 0 | 9 | 1 | 0 |
| Bodice, choli | | | | | | 1 | 2 | 0 | 3 | 0 | | | | | |
| Robe, <i>shalu</i> | 1 | 200 | 0 | 300 | 0 | | 1 | | | | | | | | |
| Robe, <i>paithani</i> | 1 | 100 | 0 | 600 | 0 | 1 | 75 | 0 | 150 | 0 | | | | | |
| Robe, pitambar | 1 | 50 | 0 | 100 | 0 | | | | | | | | | | |
| Robe, Dhanvadi rasta | 2 | 20 | 0 | 40 | 0 | 1 | 10 | 0 | 15 | 0 | 1 | 10 | 0 | 15 | 0 |
| Robe, <i>Barhanpuri</i> | 2 | 20 | 0 | 40 | 0 | | - | | | | | | | | |
| Robe, <i>Ahmadabadi</i> | 2 | 15 | 0 | 25 | 0 | 1 | 10 | 0 | 20 | 0 | | | - | | |
| Robe, <i>Brahapuri</i> | | | | | | 1 | 10 | 0 | 20 | 0 | | | | | |
| Robe, <i>Ahmadabadi</i> | | | | | | | | | | | 1 | 6 | 0 | 8 | 0 |
| Robe, <i>mugra</i> | 1 | 8 | 0 | 10 | 0 | 1 | 5 | 0 | 7 | 0 | 1 | 2 | 8 | 4 | 0 |

| Robe, <i>mugra</i> | 2 | 5 | 0 | 10 | 0 | i | | | | | 1 | 1 | 1 | 1 | |
|--------------------|---|-----|---|------|---|---|-----|---|-----|---|---|----|---|----|---|
| Cheap Robes | | | - | | - | 2 | 10 | 0 | | 0 | 2 | 6 | 0 | 8 | 0 |
| Shawls, a Pair of | 1 | 50 | 0 | 100 | 0 | 1 | 25 | 0 | 50 | 0 | | | 1 | | |
| Scarf shela | 1 | 25 | 0 | 40 | 0 | | | | | | | - | ! | | |
| | | 513 | 0 | 1200 | 0 | | 157 | 0 | 296 | 8 | | 27 | 6 | 41 | 0 |

1

The value of a woman's ornaments varies from about £ 150 to about £.750 (Rs. 1500-7500). The details are: Of HEAD ORNAMENTS, chandrakor, the quarter or crescent moon, 10s. to £2 (Rs. 5-20); phul or flower, 6s. to £1 10s. (Rs. 3-15); ketak, the flower of the Pandanus odoratissimus, 10s. to £1 10s. (Rs. 5-15); rakhdi, a flower-shaped ornament, £1 to £2 10s. (Rs. 10-25); mud, shaped like a cone, 16s. to £4 (Rs. 8-40); phirkiche phul, or the screw-ornament shaped like a flower, 10s. to £1 (Rs. 5-10); and agra phul, the last flower, 6s. to 10s. (Rs. 3-8), total £3 18s. to £13 6s. (Rs. 39 -133). Of EAR ORNAMENTS, bugdis £1 12s. to £20 (Rs. 16 - 200); balis,£1 to £5 (Rs. 10-50); kudi, £1 10s. to £7 10s. (Rs. 15-75); kurdu, a sacred grass, of gold and pearls, 10s. to £2 (Rs. 5-20); kap, literally a slice, £10 to £50 (Rs. 100-500), total £14 12s. to £84 10s. (Rs. 146 - 845). Of NOSE ORNAMENTS, a nath, a gold nosering set with pearls, £1 4s. to £50 (Rs. 12 - 500). Of NECK ORNAMENTS, mangal sutra the lucky thread of black beads, 10s. to £2 (Rs. 5-20); chandrahar a string of crescents, £30 to£80(Rs. 300-800); vajratik, literally thunder boltspangle, perhaps a lightning-guard, £1 4s. to £7 10s. (Rs. 12-75); putlyache gathle a necklace of gold coins £2 to £30 (Rs. 20-300); kantha, literally necklace, of fold and pearls, £5 to £40 (Rs. 50-400); ekdani pot, the one-grain necklace, of glass beads with a large central gold stud, 10s. to £1 10s. (Rs. 5 -15); sari, £8 to £50 (Rs. 80-500); thusi, supposed to represent a thrashed wheat ear, but more-like a leaf of the sacred basil or tulsi, £5 to £20 (Rs. 50- 200); vindivijora, literally a lightning scarer, £10 to £50 (Rs. 100-500); and jondhali pot, literally millet-grain string, in shape like a row of millet grains, £2 to £4 (Rs. 20-40), total £64 4s. to £285 (Rs. 642-2850). Of WRISTLETS, rui phul kakne, literally a thread of rui or Calotropis gigantea flowers in form like the rui flower one of the holiest and most spirit-scaring of plants, £5 to £15 (Rs. 50-150); gold bangles or bangdis £20 to £35 (Rs. 200-350); chhand, £10 to £200 (Rs. 100-2000); patlis, £1 to £35 (Rs. 10-350); todas or cords, a rope-shaped ornament, £15 to £50 (Rs. 150-500); got, literally a circle, £20 to £60 (Rs. 200-600); and

vaki, literally a crook or curved ornament with or without diamonds, £15 to £100 (Ks. 150 -1000), total £81 to £315 (Rs. 810 - 3150). of FEET ORNAMENTS, for the ankles todas or ropes of silver, £2 to £20 (Rs. 20-200), and for the toes jodvas or double rings, 16s. to £2 (Rs. 8 - 20); phul or flower rings with a knob or boss, 2s. to 14s. (Rs. 1 - 7); gend, a flower in shape like a gonda flower, 2s. to 8s. (Rs. 1-4); and masoli in shape like fish, 8s. to £1 (Rs. 4-10), total £1 8s. to £4 2s. (Rs. 14-41).

The names of the ornaments are interesting. Several of the names show, and several of the forms bear out the evidence of the names, that before they were made of metal many of the ornaments were made of flowers or of grass. The kind of flower, grass or plant chosen, and the character of the originals of the ornaments which have not their source in plants or trees, suggest that at first all were worn, not as they are now worn for look's sake, but because the objects from which they were made or of which they were copies were holy or spirit-scaring objects. At least in the case of plants the root of the belief in their spirit-scaring power seems to have been the experience of their healing power, the belief that spirits fear and flee from healing plants being part of the early theory that sickness is spirit-caused. Most of the ornaments which are not metal copies of holy plants are copies of other holy or spirit-scaring objects, the moon, the sun, the cobra, and the sacred bull. In illustration of this suggestion a detailed account of the head ornaments worn by Brahman women is given in the Appendix.]

Till they are four years old the children of the rich, middle, and poor run naked about the house; out of doors they are covered with a cloak which is drawn over the head and ends in a peaked hood. After he is four years old a boy generally wears a waistband in the house and a girl a petticoat. Out of doors a boy is dressed in a cap and waistcoat and a girl in a petticoat and bodice. After it is seven or eight years old, a child's dress comes to cost as much as a grown person's. The value of a rich boy's wardrobe varies from £50 to £100 (Rs. 500-1000), of a middle-class boy's from £20 to £40 (Rs. 220-400), and of a poor boy's from £4 to £7 (Rs. 40-70). The value of a rich girl's wardrobe varies from £25 to £50 (Rs. 250-500), of a middle class girl's from £17 to £28 (Rs. 170-280), and of a poor girl's from £3 to £5 (Rs. 30-50) [The details are:

Brahman Boy's Clothes.

| ADTIGUE | | RIC | Н. | | | MIDE | DLE. | | | РО | OR. | |
|---------------------------------------|-----|-----|-----|---|-----|------|------|----|-----|----|-----|----|
| ARTICLE. | Fr | om | Т | 0 | Fr | om | Т | 0 | Fr | om | Т | ō |
| | Rs. | a. | Rs. | a | Rs. | a. | Rs. | a. | Rs. | a. | Rs. | a. |
| Cap of Gold and Silver Lace | 6 | 0 | 10 | 0 | 4 | 0 | 6 | 0 | - | | | |
| Cap of Wool | 0 | 8 | 1 | 0 | 0 | 8 | 1 | 0 | 0 | 8 | 0 | 12 |
| Hood, <i>kuncki</i> of <i>kinkhab</i> | 5 | 0 | 10 | 0 | 4 | 0 | 8 | 0 | | | | |
| Hood, <i>kuncki</i> of Cotton-silk | 3 | 0 | 5 | 0 | 3 | 0 | 5 | 0 | 1 | 0 | 2 | 0 |
| Hood, <i>kuncki</i> of Chintz | 1 | 0 | 1 | 8 | 1 | 0 | 1 | 8 | 0 | 8 | 0 | 12 |
| Waistcoat, banyan | 0 | 12 | 1 | 0 | 0 | 12 | 1 | 0 | 0 | 8 | 0 | 12 |
| Coat <i>angarkha</i> of Silk | 6 | 0 | 12 | 0 | 5 | 0 | 7 | 0 | | | | |
| Coat <i>angarkha</i> of Cotton | 2 | 0 | 2 | 8 | 1 | 0 | 1 | 8 | 0 | 12 | 1 | 0 |
| Coat, <i>dagla,</i> Broadcloth | 3 | 0 | 5 | 0 | 2 | 0 | 4 | 0 | 1 | 0 | 1 | 8 |
| Shouldercloth, uparna, Silk-edged. | 5 | 0 | 6 | 0 | 4 | 0 | 5 | 0 | | | | |
| Shouldercloth, uparna, Plain | | | | | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 8 |
| Trousers, tuman, Cotton-silk | 3 | 0 | 5 | 0 | 2 | 0 | 3 | 8 | | | | |
| Trousers, tuman, Cotton | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 8 | 0 | 12 | 1 | 0 |
| Shoes, jode | 0 | 8 | 1 | 0 | 0 | 8 | 1 | 0 | 0 | 4 | 0 | 8 |
| | 36 | 12 | 62 | 0 | 29 | 12 | 48 | 0 | 6 | 4 | 9 | 12 |

Brahman Girls Clothes.

| ADTICLE | | RI | CH. | | M | 1ID | DLE. | • | | PC | OR. | |
|----------------------------------|-----|----|-----|----|-----|-----|------|----|-----|----|-----|----|
| ARTICLE. | Fro | m | Т | 0 | Fro | m | Т | 0 | Fro | om | Т | o |
| | Rs. | a. | Rs. | a. | Rs. | a. | Rs. | a. | Rs. | a. | Rs. | a. |
| Hood, kunchi of kankhab | 5 | 0 | 10 | 0 | 4 | 0 | 8 | 0 | | | | |
| Hood, of striped Silk- cotton | 3 | 0 | 5 | 0 | 3 | 0 | 5 | 0 | 1 | 0 | 2 | 0 |
| Hood, of Chintz | 1 | 0 | 1 | 8 | 1 | 0 | 1 | 8 | 0 | 8 | 0 | 12 |
| Bodice of Gold Cloth | 4 | 0 | 6 | 0 | | | | | | | | |
| Bodice of Gold Cloth | 3 | 0 | 5 | 0 | 2 | 0 | 3 | 0 | | | | |
| Petticoat of kinkhab | 15 | 0 | 25 | 0 | | | | | | | | |
| Petticoat called Barhanpuri | 7 | 0 | 8 | 0 | 4 | 0 | 5 | 0 | | | | |
| Petticoat | 7 | 0 | 10 | 0 | 5 | 0 | 7 | 0 | | | | |
| Robe and Bodice, sadi- choli | 8 | 0 | 10 | 0 | 5 | 0 | 6 | 0 | 1 | 0 | 1 | 8 |
| Total | 53 | 0 | 80 | 8 | 24 | 0 | 35 | 8 | 2 | 8 | 4 | 4 |

]

The value of a boy's ornaments varies in a rich family from £50 to £90 (Rs. 500 - 900), in a middle-class family from £19 to £35 (Rs. 190 - 350), and in a poor family from £3 to £6 (Rs. 30 - 60). The value of a girl's ornaments varies in a rich family from £19 to £40 (Rs. 190 - 400), in a middle-class family from £15 to £25 (Rs. 150 - 250), and in a poor family from £2 to £5 (Rs. 20 - 50). [The details are:

Brahman Boy's Ornaments.

| ADTICLE | RIC | CH. | MID | DLE. | PO | OR. |
|----------|------|-----|------|------|------|-----|
| ARTICLE. | From | То | From | То | From | То |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |

| Earrings, Gold and Pearl bhikbali | 40 | 100 | 15 | 50 | | |
|------------------------------------|-----|-----|-----|-----|----|----|
| Earrings, Gold and Pearl chavkade. | 25 | 75 | 15 | 30 | | |
| Earrings, Gold and Pearl kuduk | 8 | 12 | 3 | 7 | | |
| Necklaces, Gold <i>hasli</i> | 50 | 150 | 50 | 75 | | |
| Necklaces, Silver hasli | | | | | 10 | 15 |
| Necklaces, Gold tait | 25 | 50 | 25 | 30 | | |
| Necklaces, Silver tait | | | | | 2 | 5 |
| Bracelets, Gold tode | 150 | 200 | | | | |
| Bracelets, Silver tode | | | 15 | 25 | 8 | 15 |
| Bracelets, Gold kadi | 150 | 200 | | | | |
| Bracelets, Silver kadi | | | 15 | 25 | 5 | 15 |
| Girdles, Silver or Gold sakhli | 10 | 15 | 6 | 10 | 2 | 6 |
| Girdles, Silver or Gold kargota | 10 | 20 | 10 | 15 | | |
| Anklets, Silver tode | 30 | 60 | 20 | 40 | | |
| Anklets, Silver Silver vale | 8 | 10 | 5 | 8 | 5 | 8 |
| Anklets, Silver Silver tordya | 10 | 20 | 10 | 20 | | |
| | 516 | 912 | 189 | 335 | 32 | 64 |

Brahman Girl's Ornaments.

| ARTICLE. | Rich. | | MIDI | DLE., | POOR. | |
|---------------------------|-------|-----|------|-------|-------|-----|
| | From | То | From | То | From | То |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Hair Ornament, Gold phule | 10 | 15 | 6 | 10 | 3 | 5 |
| Earrings, Gold bugdya | 10 | 20 | 4 | 6 | 1 | 3 |
| Necklace, Gold tait | 25 | 50 | 13 | 30 | | |
| Necklace, Gold taiti | | | | | 2 | 5 |

| Necklace, Gold hasli | 50 | 150 | 50 | 75 | | |
|--------------------------|-----|-----|-----|-----|----|----|
| Necklace, Silver, hasli | | | | | 10 | 15 |
| Bracelets, Gold bindli | 20 | 40 | 16 | 25 | | |
| Bracelets, Gold mangatya | 15 | 30 | 12 | 20 | | |
| Girdle, Silver, sakhli | 10 | 15 | 6 | 10 | | |
| Anklets, Silver, tode | 30 | 60 | 20 | 40 | 10 | 15 |
| Anklets, Silver, vale | 8 | 10 | 5 | 8 | | |
| Anklets, Silver, tordya | 10 | 20 | 10 | 20 | | |
| Total. | 188 | 410 | 144 | 244 | 26 | 44 |

1

Character.

As a class Chitpavans are notable for their cleanness and for their neatness and taste in dress; their stinginess, hardness, and craftiness are also proverbial. Chitpavans are beyond doubt one of the ablest classes in Western India. They were the mainstay of the Maratha power when the Maratha power was at its highest. In 1727 the Nizam found every place filled with Konkan Brahmans; [Grant Duff's Marathas, 221.] in 1817 Mr. Elphinstone found all the leading Brahmans in the Poona Government connected with the Konkan. [Pendhari and Maratha Wars, 112.] Under the English they have lost much of the power which for a century (1717-1817) they enjoyed. Still their superior intellect, their eagerness for education, and the high positions they hold in Government service enable them to maintain their supremacy in all Marathi-speaking districts. [Nairne's Konkan, 133. Beyond the limits of Western India their talents are admired and respected. In Sir George Campbell's opinion no Hindus have shown greater administrative talent or acuteness, [Ethnological Number of the Bengal Asiatic Society, XXXV. 70.1 and Mr. Sherring held that for quickness of intellect, for energy, practical power, and learning they are unsurpassed. [Hindu Tribes and Castes, 77. Sir George Campbell's and Mr. Sherring's remarks apparently include Deccan as well as Konkan Marathi Brahmans. In all walks of life Deccan Brahmans press Chitpavans close. Still as a class Chitpavans are generally considered keener, more pushing, and guicker minded than Deccan Brahmans and have a larger proportion of men of marked talent.] They are Government servants, lawyers, engineers, doctors, traders,

moneylenders, moneychangers, writers, landowners, husbandmen, and religions beggars.

Daily Life.

A rich Chitpavan rises at seven, bows to the picture of his favourite god, washes his face, bows to the sun, and drinks a cup of Milk coffee or tea. He sits talking till eight, and, attended by a Brahman servant or two, bathes, and tying a silk or newly-washed cotton waistcloth round his middle and setting his feet on wooden pattens, goes to the houseshrine or god-room. In the house shrine he sits on a low wooden stool before the gods for about half an hour, repeating prayers, worshipping, and chanting verses. When his worship is over, he marks his brow with the tilak or sect-mark, changes his silk waistcloth, if he has worn- it, for a cotton waistcloth and sits in his office doing business till eleven. He dines with some male friends or near relations, chews betelnut and leaves, and sleeps for an hour or two, awakes about two, washes his hands and face, dresses and sits in his office, and, towards evening, goes to look after his estate or to walk. He comes back about six,; washes, puts on a silk waistcloth, prays, chants, sups, and goes to bed about ten. Middle-class Brahmans may be divided into grahasths or laymen and bhikshuks or clerics. Lay Brahmans belong to two classes, those who are employed as clerks in Government or traders' offices and those who lend money or manage land on their own account. A Brahman clerk in the service of Government or of a trader rises at six, washes, and goes to market to buy whatever is wanted in the house. He returns, bathes between eight and nine, and, after repeating prayers, worshipping, and chanting verses for about ten minutes, dines. After dinner he chews betelnut and leaves, dresses, and goes to office. He comes back at six, generally reads a newspaper, or sits talking, washes, repeats Sanskrit prayers for ten minutes, and sups at or after seven. After supper he chews betelnut and leaves, smokes tobacco, and sometimes plays chess or cards. He goes to bed about ten. Middle-class lay Brahmans, who are not in service, are generally landowners and moneylenders. A man of this class rises about six, washes, and sits on his veranda chewing betelnut betel leaves and tobacco, and doing business. He bathes at nine, worships, and again sits on the veranda doing business. About noon he goes into the house, dines, sleeps for an hour or for two hours at the most, and again sits in the veranda till four. He then goes to look after his property, and, after visiting a temple, returns at dark; about an hour later he sups and goes to bed about ten. A priestly or bhikshuk Brahman rises earlier than a lay Brahman, washes, and finishes his prayers and worship by seven. If he has

anything to buy, any food to beg, any enquiry to make about a dinner or if he has friends or relations to see, he goes out; if not he sits repeating the Veds or reading Purans till nine. About ten he washes, and putting on a silk waistcloth makes offerings of water, cooked rice, and flowers to fire and to gods, and dines. He dries his hands and mouth with a towel which he always carries in his hand or across his shoulder, and chews betelnut and betel leaves. About noon he goes to sleep, and wakening about two washes and sits reading his sacred books. At five he goes out, visits a temple, and returns at sunset. After his return he repeats prayers and other verses, till about seven; ho then sups and either sits talking or reading some sacred book and retires at ten. Poor Brahmans may be divided into priests and beggars. These rise at five, bathe, and put on a fresh or woollen waistcloth and repeat Sanskrit prayers till about seven. When his prayers are over he marks his brow with the tilak or sect-mark and goes out, the beggar to beg, the family priest to his patrons' houses, where he worships the house gods, and helps the family if any marriage, thread ceremony, or other important family business is on hand. Their dinner hour is not fixed; it is generally about twelve. A begging Brahman does not always dine at home, but whether he dines late or early at home or abroad he never misses his midday sleep. Generally after meals priests gather at a fixed place, and repeat Vedic texts or talk on various subjects, and receive invitations to dinner for the next day. They return home after sunset, repeat prayers, dine, and go to bed about nine.

A rich woman rises before her husband, and after nursing her child if she has a young child, hands it to her servant, who is generally of the Maratha caste. She bows before the basil plant and to the sun, washes, and repeats verses. She next gives orders to the cook who is generally a man, and to other household servants who are generally women, has her hair combed, and bathes. The strictness of the rule that certain articles in a house may be touched and certain articles may not be touched by a middle-class or Shudra servant complicates the arrangements in a Brahman household. A Kunbi servant cannot go to the god-room, kitchen, and dining room of the house. He may touch bedding and woollen clothes; he may not touch fresh home washed cotton clothes. He may touch dry grain; he can touch no grain that is wet. These rules are puzzling and much care is required in teaching and learning them. Even Brahman servants are hampered by rules. When they have bathed and put on woollen, flax, or silk clothes they are pure and can touch anything. They become impure if they touch anything impure such as bedding or such wearing apparel as a coat or a turban. If they touch a shoe or a piece of leather they have to bathe. A schoolboy after his bath has to get a servant or a younger brother or

sister to turn the pages of his leather-covered school book. Mr. M. M. Kunte.] After her she puts on a fresh robe and bodice, worships the basil plant and other house gods, and reads a chapter of some sacred Marathi book. She superintends the cooking of the midday meal, and when the men have begun to eat dines in a separate room. When her meal is over she sleeps for about two hours, and after wakening sits talking with neighbours or relations. About five, she visits a temple for a few minutes and on her return looks to the cooking of the evening meal, and,, when supper is over, goes to bed at ten. A middle-class woman, like a rich woman, rises before her husband, bows to the sweet basil plant, and washes. She sweeps the cooking room, puts the vessels in order, kindles a fire, and sets a pot of cold water over it. She sweeps the god-room, prepares lights, arranges vessels and flowers, and, taking the pot from the fire, bathes. After bathing and combing her hair she begins to cook. When dinner is ready she serves it to her husband and other male members of the family in the women's hall, and to the women of the family in or near the cookroom. After they have finished she takes her own dinner. She cowdungs the cook-room, sleeps half an hour to an hour, and sets to cleaning rice, cutting vegetables, sweeping, and cooking. About seven or eight she serves supper, and, after the men of the house have finished, she herself sups, cowdungs the cook-room, and goes to bed after ten. The life of a poor woman is the same as the life of a middleclass woman, except that as she has all the housework to do she has little leisure from dawn till ten at night. Occasionally she is able to rest between two and four in the afternoon when she chats with her neighbours or goes to hear a preacher. With her neighbours her talk is of her troubles and worries and about her children, how she is to clothe them and how her husband can ever get money enough to marry them. Either at a pond or a river bank she has to wash all the cotton clothes and occasionally the woollen and silk clothes which her husband and children used the day before, and carries back to the house a pitcher full of water which she rests on her right hip. So important a part is this of their daily life that, when they meet, the poorer Brahman women ask each other if their day's washing and water-drawing is over. The husband milks the cow if there is a cow, and the wife warms the milk, puts a little whey into it, and turns it into curds. The curds are churned into whey or buttermilk, the buttermilk is kept, and the butter is clarified into ghi. As all these operations are pure the churning pole and strings cannot be touched freely by any person except the mother and the wife to whom the management of the dairy always belongs. The washings of the cooking vessels, broken pieces of food, the cleanings of grain, and the remains of uncooked vegetables are gathered in a vessel and kept in a corner, and form

part of the cow's food. When a boy becomes five years old his life begins to be ordered by regular hours. He rises about six, his face is washed and he is taught to repeat verses in praise of the sun and other gods, and to bow to them. About seven he has a dish of riceporridge and milk, or bread and milk. About eight or nine he is bathed in warm water and dines with his father about noon. After dinner he sleeps for about two hours when he gets some sweetmeats or, milk and bread. About four he is taken out and brought home between five and six, and, after eating some milk and bread, is sent to bed. When about six years old a boy is generally sent to school. He now rises at five, his face is washed, and he gets some bread and milk and is taken to school. He returns at ten and is bathed and sandal is rubbed on his brow. He dines about eleven with his father and after dinner takes a nap. He rises about twelve or one, eats sweetmeats, and is taken to school, and brought back at six. He sups before seven and goes to bed soon after. Except that he has less milk and few or no sweetmeats the daily life of a middle-class and of a poor boy is much the same as that of a rich man's son. The daily life of a rich man's daughter is much the same as that of his son. A few middle-class families, like the rich, send their girls to school, while the poor and a few of the middle-class girls help their mothers in housework and pass the rest of their time in play.

Chitpavans are either Apastambas or Rigvedis, that is their rites are regulated either by texts written by the sage Apastamba of the Krishna or Black Yajurved or they are regulated by the text of the Rigved. Apastamba and Rigvedi Chitpavans intermarry. They are Smarts that is followers of Shankaracharya who hold the doctrine that the soul and the world are one. The original Shankaracharya, who was a Namburi Brahman of the Malabar Coast, is believed to have lived about A.D. 700. He has been succeeded by thirty-three pontiffs whose headquarters are at Shringeri in West Maisur. His followers are found chiefly in Western and Southern India. They worship Shiv, Vishnu, and other gods, and observe the regular Brahmanic fasts and feasts. Their priests, who belong to their own caste, spend most of their time at their patrons or *yaimans*. The family priest is most useful to his patron. Besides his religious duties he buys articles wanted by the ladies of his patron's family and helps his patron in procuring good matches for his children, or in arranging the terms patron, if he has a mind for it, also finds his priest a ready listener or talker on abstruse subjects, the origin of life, the force that made and moulds the world, and together they sigh over the thought that life is a vain show and that their share of the glitter of life is so small. Though the social power of the orthodox is less than it was, and though among the

younger men some are careless of the rules of caste, the hereditary connection between priest and patron and the self-containedness of a Brahman family are powers strongly opposed to change. Families who incline to leave the old ways are often forced to conform by the knowledge that innovators find great difficulty in marrying their daughters and getting wives for their sons. As a class, Chitpavans have zealously taken to the study of English. In the whole of the Poona district few Chitpavan families are without one or two young men who know some English. The bulk of the men in some streets in Poona city understand English, and even those who are settled in villages as husbandmen take care to secure an English education for their sons.

[Mr. M. M. Kunte.]

Customs.

For her first confinement a young wife generally goes to her parents' house. When labour begins the girl is taken to a warm room whose windows have been closed with paper. Great anxiety is felt that the birth should happen at a lucky moment. Should the child be born in an unlucky hour, as when the mul nakshatra or the twenty-fourth constellation is in the ascendant, it is believed that either its father or its mother will not live long. When the woman has been taken to the lying-in room a midwife is sent for, and if the woman suffers severely the family priest is called to read the verses from the Veds and Purans which drive away evil spirits. Sesamum oil and bent grass or durva are brought and handed to the family priest or any elder of the family, who holds the grass in the oil and repeats verses either one hundred or one thousand times over the oil. Some of the oil is then given to the woman to drink, a cow's skull is hung over her head in the room or laid on the housetop, and the rest of the oil is rubbed on her body. As soon as it is born the child is laid in a winnowing fan, the mother and child are bathed in hot water, fire is kept burning in the room, myrrhincense is burnt, an iron bar is laid on the threshold of the lying-in room, and an earthen jar filled with cow's urine with a branch of nim leaves floating in it is set at the entrance of the lying-in room. To prevent evil spirits coming in along with them any person entering the room must take the nim twig and with it sprinkle his or her feet with the urine. When the father of the child hears of the birth, he goes to the house to perform the *jatkarm* or birth-ceremony. When he reaches the house he bathes either in hot or cold water from a pot in which a gold ring has been dropped, and washes the clothes he was wearing when the news of the child's birth came to him. The person who performs a birth ceremony is considered as impure as the person who performs a death ceremony. In case the father suffers from some

grievous malady such as leprosy, some one of his family performs the rite. Whether the father performs the rite or not he must bathe and wash and must avoid touching any one until he has washed. In the women's hall a square is traced with quartz powder and two low wooden stools are set in the square. The father, wearing a rich silk waistcloth, bows before the house gods and the elders, and sits on the stool to perform the birth ceremony. Before he begins he pours a ladleful of water on the palm of his right hand and throws it on the ground, saying, ' I throw this water to cleanse the child from the impurity of its mother's body.' The mother then comes from the lyingin room with the child in her arms and sits on the stool close to her husband. The punyahavachan or holy blessings, matrika-pujan or mothers' worship, and *nandishradh* or joyful-event spirit-worship, are performed. [Details of these services are given under Marriage.] Then the father, taking a gold ring, passes it through some honey and clarified butter which are laid on a sandal-powdering stone and lets a drop fall into the child's mouth. He touches the child's shoulders with right hand, and presses the ring in his left hand against both its ears. He repeats verses, smells the child's head three times, and withdraws. The midwife cuts the child's navel cord with a penknife and buries the cord outside of the house. The father takes in his right hand the ring and some cold water, and sprinkles the water on the wife's right breast who after this may begin to suckle the child. A present of money to Brahmans ends the birth-ceremony. A Brahman is engaged from the first to the tenth day to read soothing passages of scripture or shantipaths. After the reading is over he daily gives a pinch of cowdung ashes which are rubbed on the brow both of the child and of the mother.

Either on the fifth or on the sixth evening after a birth a ceremony is performed called the *shashthi-pujan* or the worship of the goddess Shashthi that is Mother Sixth. An elderly woman draws six red lines on the wall in the mother's room, and, on the ground near the lines traces a square with lines of quartz, and in the square sets a low wooden stool. Six small heaps of rice are laid on the stool and a betelnut is set on each heap in honour of Jivanti, Kuhu, Raka, Shashthi, Sinivali, and Skanda, and worshipped by the women of the house. An iron weapon is kept near the god-betelnuts, and both the deities and the weapon are entreated to take care of the child. Under the mother's pillow are laid a penknife, a cane, and some leaves of *narvel* Narvelia zeylonica. At each side of the door of the mother's room are set two pieces of prickly-pear or *nivdung* and some live coal resting on rice husks. Cooked rice is served on a plantain leaf, sprinkled with red powder mustard seed and *udid* pulse, a dough lamp is placed over it, and the

whole is carried to the corner of the street for the evil spirits to eat and be pleased. Although the family is herd impure for ten days, the first, fifth, sixth, and tenth days after a birth are considered lucky for alms-giving or for feeding Brahmans on dishes prepared without water or fruit. For this reason on the evening of the fifth a feast is given to relations, friends, and bhikshuh or begging Brahmans. The sixth night is considered dangerous to the child. The women or the house keep awake all night in the mother's room, talking and singing or playing, and sometimes a Brahman is engaged to repeat verses or read soothing lessons or shantipaths with the object of driving away evil spirits. On the tenth the mother is bathed, the walls of the lying-in room are cowdunged, the bathing-place is washed, and turmeric, redpowder, flowers, and a lighted lamp are laid near or over it. The lap of the midwife, who is generally of the washerman caste, is filled with rice, betelnut, leaves, and fruit, and she is presented with a robe and a bodice and money. On the twelfth day the ear-boring or karna-vedh ceremony is performed. The mother, with the child in her arms, sits on a low wooden stool in a square traced with lines of quartz powder. The goldsmith comes with two gold wires, sits in front of the mother, and pierces with the wires first the lobe of the right ear and then the lobe of the left ear, and withdraws after receiving a present varying from a turban to $\frac{3}{6}$. ($\frac{1}{4}$ anna) and the price of the wires. A girl's ear is bored in five places, in the lobe, twice in the upper cartilage, on the tragus, and the concha of the ear. A girl's nose is bored when she is a year or two old. The hole is generally made in the left nostril; but, if the child is the subject of a vow, his right not the left nostril is bored. If a boy is the subject of a vow his right nostril is bored and a gold ring is put into it. The father, mother, and child then bathe, and the father and mother with the child in her arms sit on two low wooden stools set in a square of lines. After the *punyahavachan* or holyday blessing, and the nandishraddha or joyful-event spirit-worship rice grains are spread in a silver plate and the name of the family god or goddess is traced with the gold ring. The family astrologer comes with the child's horoscope, which he draws out at his house, and lays it in front of the silver plate. The horoscope contains four names for the child; three of these he fixes and leaves the fourth for the parents to choose. These three names are traced on the grain with the ring, and, at the same time, are traced the name of the family deity, the month, and the ruling planet. Then the family astrologer lays the ring on the rice and the whole is worshipped with sandal paste and flowers. The father worships the astrologer and setting the plate on his right knee reads out the names loudly so that the persons near may hear them. The astrologer reads out the horoscope and calls a blessing on the child's

head, saying, 'May the child live to a good old age.' A feast and a money present to Brahmans ends the naming.

A cradle is hung in the women's hall and kinswomen and friends bring a plate with a bodice, a cocoanut, a turmeric root, and a betel packet. Two low wooden stools are set near the cradle and the mother sits with the child in her arms on one of the stools. An elderly married woman marks the child's and its mother's brows with redpowder, and another woman sitting near the mother takes the child in her arms. A woman of the house and another woman from among the guests lay in the mother's lap a cocoanut, turmeric, and redpowder, and five married women lay the child in the cradle and sing songs. A lighted lamp is waved round the mother and child, and the women guests retire each with the present of a bodice and a cocoanut. When the child is a month old the mother goes to the house well, worships it, and returns.

During the fourth month if the child is a boy the sun-showing or suryavalokan is performed; in the fifth the earth-setting or bhumyu paveshan; and in the sixth, eighth, tenth, or twelfth month the foodtasting or annaprashan. In the case of a girl the sun-showing, the earth-setting, and the food-tasting are all performed at the same time. On some lucky day in a boy's fourth month a quartz square is traced in the house and two low wooden stools are placed in a line. On the right stool the father sits and on the left stool the mother sits with the child in her arms. After the *punyahavachan* or holy-day blessing, the mother goes out of the house followed by her husband, and holding her child up shows it to the Sun praying him to guard it. They walk to the village temple and presenting the god with a packet of betel and a cocoanut beg him to be kind to the child. On their return if it is on the way they call at the maternal uncle's house, where fruits are laid in the mother's lap and the child and its parents are presented with clothes and ornaments. On returning home the husband and wife wash their hands and feet, and water is waved over the head of the child and thrown away. They take their seats as before. The father fills a silver or gold cup with sugared milk mixed with curds honey and butter, and sets it on a high wooden stool, and in front of the cup lays fifteen pinches of rice and sets a betelnut on each pinch in honour of Bhumi, Chandra, Shiv, Surva, Vishnu, and the ten Dishas or Directions, and they are worshipped. Then taking the child on his knee, with its head to the south, a gold ring is passed through the contents of the cup and held up, and what falls from the ring is allowed to drop into the child's mouth. The Brahmans and the priest are given money and retire. A carpet is spread, and some carpenter's tools, pieces of cloth, a pen

ink-pot and paper, and jewelry are laid on the carpet and, to find out what the child is to become, he is laid on his face near them and the first thing he clutches shows to what calling he will take in afterlife.

Birthday

A child's birthday is marked by several observances. In the morning the father bathes in warm water and the mother and child are rubbed with sweet-smelling oils and powders and bathed in hot water. A square is traced in the women's hall, and three low wooden stools are set in the square, two in a line and the third in front of them. Eighteen little rice heaps are piled on the front stool and a betelnut is laid on each heap. One of the betelnuts represents the family-deity or kuldevta; another the birth-star deity or janma-nakshatra devata; others Ashvatthama, Bali, Bibhishan, Bhanu, Hanuman, Jamadagni, Kripacharya, Markandeya, Prajapati, Pralhad, Ram, Shasthi, Vighnesh, and Vyas; two represent the father's deceased parents. The father and mother with the child in her arms take their seats on the two stools and a married woman marks the child's brow with redpowder. The house gods and the elders are bowed to, and, with their leave, the holy-day blessing and the joyful-event spirit-worship are performed, and the eighteen deities are asked to give the child a long life. A little milk mixed with a little molasses and sesamum seed is put in a silver cup, and given to the child to drink. The Brahmans get some money and take their leave, and the day ends with a fesat. On this day the father is forbidden to pare his nails, to pluck out any hair, or to quarrel with or sleep with his wife.

Shaving.

The shaving or *chaul* of the boy's head takes place in the first., second, third, or fifth year, or at the same time as the thread-girding. In the morning of the shaving day, after anointing themselves with oil, the father, mother, and child bathe, and, dressing in rich clothes and covering themselves with shawls, sit in a line in a quartz tracing. The usual holy-day blessing and joyful-event spirit-worship are performed, the sacrificial fire is lit, the boy is seated on the knee of his maternal uncle or on a wooden stool set in a square traced with lines of quartz, and the barber shaves his head except the top-knot. The barber retires after receiving a present varying from a turban to a few copper coins. The boy is anointed with sweet-smelling oil and bathed along with his parents. After he is dried, ashes from the sacrificial fire are rubbed on his brow, and the ceremony ends with a feast to Brahmans.

Thread-girding.

Chitpavans gird their boys with the sacred thread when they are seven to ten years old. The boy's father goes to the house of the family astrologer and asks him to fix a lucky day for girding the boy. The astrologer refers to his almanac and names a day in one of the five sun-northening or waxing months, Magh or January February, Falgun or February-March, Chaitra or March April Vaishakh or April-May, and *Jyeshth* or May-June. If the boy was born on one of the five northening months the astrologer must avoid his birth-month, and if the boy is the jyeshth or eldest of his family the astrologer must avoid the month of Jyeshth or May-June. The thread-girding always takes place between six in the morning and noon; never after midday. A week or two before the day fixed for the girding the near relations and friends are told and during the interval they by turns feast the boy and his parents. Drummers and pipers are sent for and the terms on which they will play at the thread-girding are fixed, a booth or porch is built, and invitation cards or lagnachitia are sent to distant relations. To invite the caste neighbours the boy's parents and their male and female relations and friends start accompanied with music. Before they start they ask the house gods to attend the ceremony, then they ask the village god, and then their relations and friends. In the booth or porch an earthen altar is made facing the west, three of the boy's cubits long, three broad, and one high. In front is a step about a span square, and behind, the back rises about eighteen inches above the altar in three six-inch tiers, each narrower than the tier below it. The whole is whitewashed. A day before the thread-girding the punyahavachan or holy-day calling; the ghana or rice-pounding, and the devpratishtha or god-installing are performed with the same detail as before a marriage. On the morning of the thread-girding, day the boy and his parents bathe and the ghatikasthapan or lucky-hour installing, and patrikapujan or birth-paper worship are performed with the same detail as before a marriage. The mother's feast or matribhojan follows. Twelve low wooden stools are set in a row and twelve unmarried thread-wearing Brahman lads take their seats on the stools. At one end of the row are set a silver dining plate and a lighted lamp, and behind them two low wooden stools on which the boy and his mother sit. Dinner is served and all dine, the boy eating from the same plate with his mother. When the meal is over the boy goes to his father, fetches silver or copper coins, and presents them to the twelve Brahman lads. Then a quartz square is traced and a low wooden stool is set in the square. The boy is seated on the stool, and the family barber shaves his head and retires with a present varying from 2s. (Re. 1) to a turban. The boy is rubbed with sweet scents and oils, he is

bathed, his brow is marked with redpowder, and he is brought into the house. He is decked with ornaments from head to foot, a rich shawl is wrapped round his body, long wreaths of flowers are hung from his head over his chest and back down to his knees; a cocoanut and a betel packet are placed in his hands, and the priest, taking him by the arm, leads him to the house gods before whom he lays the betel packet and makes a bow. He is led before his parents and other elders in the house and bows to them, and is then taken outside and bows to Brahmans. Two low wooden stools are set on the altar facing each other, over the eastern stool about a pound of rice is poured and the boy is made to sit upon the rice; over the western stool no rice is poured and on it the boy's father sits. Round the altar are spread carpets on which learned pandits and shastris sit and on the other side of the altar the rest of the guests sit leaning on pillows and cushions. Behind the boy stands his sister with an earthen jug holding water covered with mango leaves and a cocoanut, and his mother with a lighted hanging lamp. Some male relations hold between the boy and his father a sheet of unbleached cotton cloth marked with red lines, and the family priest fills with red rice the hands of all the guests both men and women. The astrologer repeats *mangalashtaks* or lucky verses. When the lucky moment comes the cloth is pulled on one side, the boy hands the cocoanut to his father, and lays his head on his father's feet. The father blesses him, and the guests shower rice on him, and the musicians raise a blast of music. The father takes the boy and seats him on his right knee, and the guests withdraw with betel packets and a cocoanut. The Brahman priest and other laymen throw rice over the boy's head and seat the boy on a low stool to the father's right. An earthen square is traced in front of the father and blades of sacred grass are spread over it. A married woman brings alive coal from the house on a tile and lays it near the altar. The priest blesses the coal and spreads it, over the altar and on it are laid pieces of cowdung cakes and firewood. Water is sprinkled six times round the altar and rice is thrown over it. The father lays a few blades of sacred grass between himself and the fire. A cup full of butter is placed over the blades of grass and other blades are thrown over the fire. The priest keeps near him a staff or dandkasht of palas, Butea frondosa, as tall as the upraised end of the boy's top-knot, a piece of deer skin, blades of sacred or darbha grass, a rope of muni grass long enough to go round the boy's waist, two cotton threads one for the boy's waist the other for his neck, a sacred thread or janve, a bamboo basket or rovali, four short waistcloths or panchas two of which are dyed red, and four loincloths or *langotis* of which two are of silk and two are of cotton. Of the two cotton threads, the priest daubs one in oil and turmeric and ties it round the boy's waist and gives him a loincloth or

langoti to wear. He then rolls a red cloth round his waist and a white cloth round his shoulders. The other cotton thread is also rubbed with oil and turmeric and the bit of deer skin is passed into it and hung on the left shoulder of the boy in the same way as the sacred thread. A sacred thread is also hung over his left shoulder and the boy is made to pass between the sacrificial fire and his father. A wooden stool is placed near his father and the boy is seated on it facing east. A metal water-pot, a plate, and a ladle are set in front of the boy and he sips water thrice from the pot repeating verses. He is then brought back between the fire and his father and takes his former seat. The fire is rekindled, and the father taking the boy by the hand, goes out of the booth, and they both bow to the sun. Then, to the left of the fire or hom, two low wooden stools are set, and the father and son stand facing one another. The father, in his hollowed hands, takes water, a betelnut, and copper or silver, and pours them into his son's hollowed hands and the son lets them fall on the ground. After this has been repeated three times they again take their seats on the stools placed for them. The boy tells his father that he wishes to become a Brahman and to be initiated into the mysteries of the sacred verse. The boy holds out his left hand and covers it with his right, and the father ties his two hands together with the short waistcloth that was wound round the boy's shoulders. He then puts his left hand under and his right hand over the boy's bound hands, and lays them all on the boy's right knee. Then the boy and his father are covered with a shawl, and the father thrice whispers the sacred verse into his son's right ear, and he repeats it after his, father. That no one else, whether Brahman or Shudra, man or woman, may hear the verse, all present go to some distance. Then the father takes off the shawl and frees the boy's hands and the father and son take their seats in front of the fire. Blessings are asked on the boy's head and the grass string or *munj* is tied with three knots round the boy above the navel. The palas staff or dand is given in the boy's hands, and he is told always to keep it by him and not to stir without taking it in his hand, and that if he meets any dangerous animal or anything that causes him fear he should show the staff and the cause of fear will vanish. Then the father says to his son ' Up to this you have been like a Shudra, now you are a Brahman and a Brahmachari. When yon go out you must behave with religions exactness or achar; you must rub dust on your hands and feet before washing them; you must take a mouthful of water and rinse your mouth with it; you must bathe twice a day, pray, keep alight the sacred fire, beg, keep awake during the day, and study the Veds.' Then a money present is made to begging Brahmans and the rest of the guests are feasted. The mother's connection with her son is now at an end, so she too dines; the father, the boy, and three Brahmans fast

till evening. In the evening the *bhikshaval* or begging comes. The boy is dressed in a waistcloth, a coat, and a cap, and, with his palas staff in his hand, goes to the village temple accompanied by kinswomen and with baskets of sweetmeats and music. At the temple the boy places a cocoanut before the god and bows, and all return with the baskets and their contents. In the booth a low wooden stool is placed for the boy to stand on. His feet are washed and his brow is marked with redpowder and sandal paste. The bamboo basket or rovali is placed in his right hand and his palas staff in his left. His mother takes a ladle, puts a gold wristlet round its handle, fills it with rice, drops a rupee or two in the rice, and telling the women who surround her that she is giving alms to her son, pours the contents of the ladle into the bamboo basket. The other women follow and present the boy with sugar balls. When the almsgiving is over, the boy hands the basket to the priest who takes it home after giving some of the sweetmeats to the children who are present. The boy bathes and the family priest, sitting in front of him with a cup dish and ladle, teaches him the twilight literally the joining prayers or sandhya. The fire is kindled and a handful of rice is cooked over it in a metal vessel. The boy throws three pinches of cooked rice over the fire and the rest is kept on one side. Then five leaf-plates are served for the father, the son, and the three Brahmans who have fasted since morning. The rice cooked by the boy is served to the three Brahmans by a married woman. On the second and third days the *hom* fire is kindled and the boy is taught the twilight prayers or sandhya. On the morning of the fourth day the boy is bathed and seated on a stool in the booth. In front of him is raised an earthen altar or vrindavan like a tulsi pot, and a branch of the palas tree or a blade of darbha grass is planted in the altar. The boy worships the plant, and taking a spouted metal water-pot or abhishekpatra with water in it walks thrice round the altar spouting the water in an unbroken line. Then a bodicecloth, a looking glass, a comb, and glass bangles are laid in a bamboo basket near the earthen pot, and the boy retires with a low bow. The boy then makes over to the priest the loincloths, the staff, the deer skin, the sacred thread, and the grass ropes, and the priest presents him with new ones in their stead. The Brahmans are presented with money and repeat blessings over the boy's head.

Pupil's Return.

Twelve days to a month after comes the *samavartan* or pupil's return. On a lucky day the boy is bathed and an earthen altar or *sthandil* is raised in the booth. In front of the altar are set two low wooden stools. Near the stools are laid *shami* or Mimosa suma leaves, a razor, rice,

wheat, sesamum, and pulse, curds, and bullock's dung. The priest kindles a sacred fire and feeds it with butter. The boy sits on one of the stools and his parents stand behind him with two cups in their hands, one with cold water the other with hot water. The priest holds a metal plate at a little distance from the boy's head, and the boy's father, with a cup in each hand, presses the boy's head with the middle part of both his hands and pours the water from the two' cups in one spout into the plate held by the priest without letting a drop of water fall on the boy's head. The priest pours curds into the plate, and the father, taking some curds in the four fingers of his right hand, rubs them in a line on the boy's head. He begins from the boy's left ear, then goes to his left cheek down to the chin, then across the right cheek and ear, and then passes behind the head to the left ear where he began. This he repeats three times. Then the priest holds in both hands blades of sacred grass with some hairs of the boy's topknot and the father sheers them in two with a razor and gives them into the boy's hands. The priest drops a pinch of sesamum, wheat, rice, udid, and shami leaves over the cut hair in the boy's hands, and the boy gives the whole into his mother's hands who throws it in the bullock's dung. This is repeated seven times, four times beginning with the right ear and three times beginning with the left ear. Then, as if to sharpen the razor, its edge is touched with a blade of sacred grass and the razor is made over to the barber with the water from the plate. The barber shaves the boy's head, and passes the razor over his cheeks and chin, and is presented with a new handkerchief. The sesamum seed, wheat, and rice, and about Is. (8 as.) in cash are given to the Brahman priest. Karanj Pongamia glabra seeds are ground and rubbed on the boy's body, and he is bathed and seated on a low stool near the sacred fire. Sandal paste and redpowder are rubbed on his brow, redpowder on his right cheek, and lampblack on his left cheek and on both his eyes He is dressed in a waistcloth and two sacred threads are thrown round his shoulders in addition to the thread he already has on The deer skin loincloth, the palas staff, the muni grass rope and the old sacred thread are taken off, and he is dressed in a coat, shoes, and turban; flower garlands are hung from his head and round his neck, an umbrella is placed in his left hand, and a bamboo stick in his right. A waistcloth is thrown over his shoulders and the priest advises him never to bathe in the evening, never to look at naked women, to commit no adultery, never to run, never to climb a tree, never to go into a well, never to swim in a river. He ends, ' Up to this time you have been a Brahmachari, now you are a *snatak* or householder.' The boy bows before the priest and the priest blesses him. A cocoanut is placed in the boy's hand and he bows before the house gods and before his parents and elders. The boy then ties wheat flour and

sweetmeats in a waistcloth or *pancha*, and starts for Benares accompanied by relations, friends, and music. He goes to a temple and lays the cocoanut before the god. The priest or the boy's maternal uncle or some other relation asks him where he is going; he says, To Benares. They advise him not to go to Benares and promise that if he will go home they will find him a wife. He takes their advice, goes home, and the thread-girding ends with a feast.

Marriage.

Chitpavans generally marry their girls between six and ten and their boys between ten and twenty. In choosing a husband for the girl the boy should as far as possible belong to a respectable and well-to-do family, be intelligent, good looking, and a little older than the girl. Among rich and middle-class families there are other points which generally influence a girl's parents in the choice of a husband. Among poor families, though this is not always the case, money is wanted and wealth in a son-in-law outweighs suitableness of age, good looks, or intelligence. The fathers of dull or ill-behaved sons, unless they are very rich, have to spend £30 to £10 (Rs. 300-400) before they can get them married. The form of marriage in use among the Chitpavans is the $Brahma\ vivaha$ or $Brahma\ wedding$. According to this form of wedding besides a dower the bride groom receives presents with his wife.

In rich families who have a daughter to marry the women of the house, after consulting the men, send for the priest, [A rich man does] not generally employ his priest. He sends his clerk or some ether person well known to him; sometimes an elderly relation. and one of the elders of the house hands him the girl's horoscope, and naming the boy's father or an elder of the family, asks the priest to go to his house and offer the girl in marriage. When he reaches the boy's house, the priest is seated on a low wooden stool mat or carpet in the women's hall or in the veranda, and the boy's father, after hearing from the priest why he came, goes into the house and tells the women that a priest has come with the horoscope of such and such a person's daughter. The boy's father takes the horoscope and asks the priest to call for an answer in three or four days After a day or two the boy's father, if he is a rich man, sends his priest or some male relation to see the girl at her father's. He tells the envoy if the girl is handsome to ask £20 to £ 30 (Rs. 200 - 800); if she is ordinary looking to ask £ 30 to £ 50 (Rs. 300-500); and if she is ugly not to refuse her but to ask more than the parents can give. The priest goes to the girl's house, tells her father why he has come, and asks if he may see the girl. The

farther goes inside, tells his wife that so and so's priest has come to see the girl, and goes out and sits by the priest. The girl comes and the priest asks how many brothers the has, what are their names, what is her father's name, whether she has dined, and what she has had for dinner. If the girl answers clearly, the priest remarks under his breath, but so that the father may hear, 'Yes, she will reach the boy's shoulder; that is well.' Then the girl goes into the house and the priest tells her father that he approves of the girl had that if he will get so much money his master will take her in marriage for his son. After some talk the sum of money is settled and the priest goes back and tells his master. In middle-class families, after consulting his house people, the father, taking his daughter's horoscope, goes to the boy's father and offers his daughter in marriage. The boy's father says, Times are hard; I must have money, not less than £50 (Rs. 500), as my son is clever and holds a good position. Or he say he will send some one to see the girl, and will let the father know how much money he wants. A poor Chitpavan who is willing to take money for his daughter has not to look out for a husband. Men in want of wives go about with money in their hands searching for girls. There is no want of suitors and the girl's father makes the best bargain he can looking to the age of the suitor and to he amount of money he promises. In proof that he has accepted an offer the girl's father hands the boy's father a cocoanut. A day or two after the offer has been accepted the father's relations and family priests go to an astrologer. They hand him the boy's and the girl's horoscopes and ask the astrologer to see whether there is anything in the horoscopes to prevent marriage. When the boy's father is anxious to get the girl as a wife for his son he tells the astrologer to do his best to see that the stars agree, and the astrologer decides for the wedding. Other fathers again are anxious about the stars or are not anxious for the match and they ask the astrologer to examine the horoscopes closely and are not satisfied until the horoscopes are found to agree in all points. After the astrologer has given his decision each of the fathers pays him 1½d. to 2s. (1 anna-Re.1) and a cocoanut, bows to him and withdraws.

If the astrologer finds in favour of the wedding preparations are at once begun. The first thing the father does after the horoscopes have been compared is to prepare two lists, one of sundry articles the other of clothes. He heads the list of sundries with *Shri* that is praise of Ganesh, and starts the list with turmeric and redpowder or *haladkunku*, for these are lucky articles. [The other articles are: Butter, sugar, oil, molasses, rice, wheat, peas, split gram, *tur*, betelnut, thread, cloves, nutmeg, cardamoms, redpowder or *gulal*, cocoanuts, dry cocoa kernel, spices, scented oil, rose water, coir twine,

palm leaves, rafters turmeric, and bamboo basket.] The list of clothes includes silk and cotton waistcloths, robes, bodices, shouldercloths, and turbans. They hire men and women servants to clean the house, to grind grain, and to do other house work. With the help of neighbours and kinswomen, the women make sweetmeats wafer biscuits and other dishes, always taking care to begin the baking on a lucky day which the family priest tells them. The grain and pulse grinding must also be begun on a lucky day. A couple of handmills are cleaned, and five married women, whose father and mothers-in-law are alive, touch the mill with lime in five places, and laying before each handmill a betelnut and five betel leaves tie mango leaves to them. The five married women grind about five handfuls of rice and sing songs in praise of the boy and girl. The rest of the rice is ground by the servants. The five married women also grind a little wheat and udid pulse singing songs.

Musicians, who are generally Hindus of the Nhavi and Ghadshi castes, playing on the drum and pipe, are next sent for. A bargain is made with them to play music for five days at the house for a certain sum, and a betelnut is given to each of them to seal the bargain. The usual rates are 2s. to 6s. (Rs. 1-3) a day to the drum beaters or tasekaris, and 1s. to 4s. (8 as.-Rs. 15) a day to the pipers or sanais.

The building of the marriage porch or booth is begun two to twenty days before the wedding. It costs 2s. to £20 (Rs. 1 -200). On the day before he begins to build the host sends his priest to an astrologer to find what is the best time to begin. An hour or so before the appointed time the priest goes to his master's and begins to get things ready. He takes a metal plate, lays in it rice grains, sandal powder, frankincense, camphor, a lighted lamp, sugar, flowers, and redpowder. Outside of the house he orders a hole to be dug, and near the hole he sets two low wooden stools facing each other, one for himself the other for his master. Some metal water-pots of the kinds called tambva and panchpatri are filled with water. The master dressed in a silk waistcloth takes his seat on one stool, and the priest, sitting in front of him on the other, repeats texts and the host worships. He traces a quartz square in front of the bamboo or wood post which is to form the chief post of the booth, offers a pinch of sugar, and asks the god of the booth to be kindly. The boy's father with his priest and a couple of relations goes to the girl's with a flower garland, sugar, and if well todo gold or silver ornaments. At the girl's, with his companions he sits on a carpet or mat, and the astrologer, consulting both the boy's and the girl's horoscopes, finds a lucky moment for holding the wedding. The girl is made to stand in front of her father's house gods, her brow

is marked with redpowder, a flower garland is put on her head, and an ornament is put on her person. Sugar is handed round and the company retires.

The head of the house writes a letter asking the house and the family gods to be present during the marriage festivities. He marks it with redpowder and places it in the god-house or devhara. To ask guests to the wedding, near of kin both men and women, come the day before the wedding and stay five days. Sometimes the girl's people ask the quests by themselves and the boy's people by themselves in a different party. But generally one party goes to the house of the other and the two parties join and make the invitations together. The formal invitation is known as akshat. At both houses, before either party starts, the priest takes two silver cups and fills them with grains of rice mixed with redpowder; he also takes a bag of cocoanuts and betelnuts. Of the two silver cups he gives one to one of the women who is to go with the party and holds the other in his hands; the bag he gives to one of the servants who hangs it from his shoulder falling on his back or side. At the girl's house, if it has been arranged that the girl's party are to call at the boy's, both men and women dress in their best, and to hurry them the priest orders the musicians to play. Then the party starts, but not before they lay a few grains of coloured rice and a cocoanut in front of the house gods, bow low to them, and ask them to be present at the wedding. At the same time the priest is asked to attend the boundary-worship and the troth-plighting. Then the party start, accompanied by the priest, musicians, servants, a couple of men with guns, and a gaily harnessed horse. First go the men with guns, then the musicians followed by a boy on horseback, then the priest with the silver cup in his hands containing grains of red-coloured rice, then the men, behind them the women, and last a couple of servants, one of them with the cocoanut and betelnut bag under his arm if it is evening there are a couple of torch-bearers. In this way they go to the boy's house where the men, women, children, and priest of the boy's house are ready to start. The two parties go together to the temple of Ganpati. Here the men and the priests enter the temple, leave a pinch of coloured rice near the god, and pray him to be present at the marriage booth for five days to ward off danger and trouble. They go to the houses of kinspeople, friends, and acquaintances. At each house one of the priests lays a few grains of coloured rice in the host's hands and naming the house and the day asks him to the marriage. The women go into the house, lay a few grains in an elderly woman's hands, and invite the family to the wedding, asking some to the dinners, some to stay for five days, and some to be present at the wedding ceremony. If they are near

relations the inviters are given two cocoanuts, which are handed to the servants; if they are not near relations they leave the, house after having given the invitation. When all the other guests have been invited their masters ask the priests to attend.

Either on the marriage day or on the day before, a stone handmill, a wooden mortar, and a couple of pestles are washed, and the pestles are tied together with a cotton thread and hung with mango leaves and a gold neck ornament and kept in some secure part of the house. In the mortar are laid four pieces of turmeric roots, a bamboo basket with rice, a new date mat, and a winnowing fan with udid pulse. A little before five in the morning or at eleven, which-over is the lucky hour, a girl or two is sent with music to call the women quests. In the women's hall a square is traced with red-powder and three low wooden stools for the father mother and son are set in a line, covered with sacking, and a fourth is set for the priest at some distance in front. The priest gives into the father's hands a cocoanut, a betelnut, and two leaves, and leads the way followed by the father mother and boy to the family gods before whom the father lays the cocoanut and betelnut and leaves and asks if he may go on with the ceremony. They next go to the elder guests and ask their leave, and when the elders have given them leave take their seats on the three stools. The priest worships Ganpati, lays on the mat in front of the father a handmill to whose neck the father ties a couple of mango leaves and marks it in five places with lime and turmeric powder. Meanwhile five married women whose fathers and mothers-in-law are alive rub the boy and his father and mother with sesamum oil and sing songs while the father fastens the mango leaves to the grindstone. When the grindstone is ready, the father grasps the bottom of the handle, the mother grasps it holding her hand further up the handle than the father, and the boy grasps it holding his hand further up than the mother. Then the women drop in the *udid* pulse and the three give the stone a few turns. After they have ground a little of the pulse, the father mother and boy leave their seats, and the five married women grind the pulse into fine powder singing songs in praise of the boy and girl. Next the bamboo basket, to which a silk bodice has been tied, is brought filled with rice. Mango leaves are tied to the pestles, and the father mother and son and the five married women help in pounding the rice. After a little pounding the married women are offered a little sugar or molasses and the pestles are put back in their places, care being taken that they do not strike against each other, as it is believed that the knocking of pestles causes confusion and guarrels in a house. The hands of five married women are rubbed with turmeric, their

brows are touched with redpowder, flowers are stuck in their hair, and the parents bow before them.

At the boy's house a quartz square is traced in the women's hall and a stool is set inside of the square, and the boy is seated on the stool with his legs resting on the ground. A cup containing turmeric powder is given to the boy's mother who pours scented oil into it and either herself or the boy's sister takes a mango leaf, places a betelnut over it, and holding the leaf with both her hands, dips the end of the leaf into the cup and with it five times touches the boy's feet, knees, shoulders, and head. This is repeated five times by each of the four other married women. After they have done, the sister or any one of the five women rubs the boy's body with turmeric, and taking him near the door of the booth, seats him on a stool, and bathes him. When his bath is over the boy goes into the house and puts on a fresh waistcloth. They now make ready to carry to the girl what remains of the turmeric. In a winnowing fan a married woman lays a pound or two of rice, two cocoanuts, some betelnut and leaves, cups containing turmeric redpowder and oil, and a robe and a bodice. The winnowing fan is given to a servant to carry on his head, and the five married women with music accompany her to the girl's. On reaching the girl's the women are received and seated in the women's hall. The girl is brought out and seated on a stool which is placed in a square tracing, she is touched as the boy was touched five times over with a mango leaf dipped in turmeric, and bathed by her sister. She is then seated on another stool, and the boy's sister presents her with a robe and bodice, rubs her hands with turmeric and her brow with redpowder and fills her lap with the cocoanut and betelnut and grains of rice. The laps of both the girl's mother and sister are also filled and the guests are presented with turmeric and redpowder and withdraw.

The next ceremony is the *punyahavachan* or holy-day blessing which is also called the *devaksthapan* or guardian-enshrining. It is performed either on the marriage day or on the day before the marriage. About seven in the morning, both at the girl's and at the boy's, in the centre of the marriage booth, a married woman traces a square, and, in the square, places three low wooden stools in a line covered with a piece of woollen cloth, a blanket, or a woollen waistcloth. A fourth stool is set in front of the three and a fifth to the left for the priest. When these preparations have been made the boy and his parents sit themselves on the three stools and the priest on the fifth stool to the father's left. A little in front of them are spread carpets and mats on which begging priests or *bhikshuks* sit. Then the family priest leaves his stool and brings from the house a plate containing a number of

articles of worship. [The articles are: Bunches of mango leaves, one round bamboo basket, two bodicecloths, two or three pounds of rice, thirty to thirty-live betelnuts, there metal water-cups, one water-pot; two earthen jars, six umbar sticks each stick rolled round with a mango leaf and tied with thread, flowers, sandal, bent glass, curds sacred grass, camphor, frankincense, and some coppers, together worth 2s. to 6s. Rs.1-3.] On the stool in front of him the father places a basket with twenty-seven small heaps of rice and a betelnut on each heap, an earthen water-pot or avignakalash filled with rice, a piece of a turmeric root, a copper coin, some betelnuts, a sweetmeat ball, and an earthen jar with a betelnut and a copper coin inside and its mouth closed by mango leaves and a cocoanut. Before the stool on which these articles are laid is set a dish, a water-pot, and a cup and ladle. When everything is ready the priest goes into the house and says, 'We are too late; the worship cannot be finished till after dark' This is to hurry the boy's parents who are dressing with care in their best clothes. The father comes out in a silk waistcloth, a shawl, and a second waistcloth folded round his head; the mother in a silk robe and bodice, and a shawl over her shoulders; and the boy in a silk waistcloth and a shouldercloth. If the mother owing to the recent death of a child or of some other near relation or in case she has them not, wears no ornaments, a near kinswoman among the guests takes off some of her own ornament and in spite of objections makes the mother wear them. When they are ready the priest puts in the father's hand a cocoanut and a packet of betel leaves, and, followed by the father the mother and the son, goes to the household gods. The father lays the cocoanut and betel leaves before the gods, and he and mother and the the boy bow low to the gods and ask their leave to go on with the ceremony, Then, going to each of the elders of the family, including the widows, the priest says, They are come to ask your leave to perform the ceremony; and the father and mother bow before them. Then they follow the priest into the marriage hall. Before taking their seats they bow to the begging priests who muster in strength and have taken their seats on the carpets and mats, and lastly they bow to the family priest They take their seats amid the blessings of the company. The father sits on the first stool, the mother on the one next to his right and the boy on the third. The priest repeats verses and calls the name of the boy's sister. She comes with a plate containing a chaplet of flowers, a leaf-cup with milk, and another with wet redpowder or *pinjar*, a box with redpowder mixed with cocoanut oil or kunku, a few grains of rice, and a lighted brass hanging lamp. She takes a pinch of redpowder and with it touches the priest's brow, sticks a few grains of rice on the redpowder, presents him with a cocoanut, and waves a lighted lamp before his face. Then she waves the lamp

round the faces of a few of the leading Brahmans, then round the father and mother, and lastly round the face of the boy, and ties a chaplet of flowers round his head Then the priest blesses the boy's sister, the mother waves the lighted lamp before her face, the father presents her with a cocoanut, and she retires. The family priest places a betelnut in a leaf-cup to represent Ganpati and asks the father to worship it, while he and the begging priests repeat verses and with his hand motions the father how to worship. The father takes a few blades of bent, grass, and sprinkles water and sandal powder on the betelnut Ganpati, throws redpowder grains of rice and flowers over it, waves burning camphor frankincense and a lighted lamp round it, and lays sugar before it. He takes one of the two pots with the cocoanut stoppers, touches with the stopper his own, his wife's, and the boy's head, and sets the pot on the ground as before; he takes the same pot a second time and a third time, touches with it his own head and the heads of his wife and son, and lays it on the ground. He goes through the game performance with the second pot which he went through with the first. All the while the family priest repeats verses and the musicians play their sambal or nagara drums and their sur and sanai pipes. Three farthings to 3d. ($\frac{1}{2}$ -2 as.) is given to each of the begging priests. The family priest calls the boy's sister and she comes carrying a lighted lamp. Then they go into the house, the girl with the lamp lighting the way followed by the father with a flat bamboo basket, his wife holding the earthen jars, and the priest with a water cup and ladle. When they reach the door of the god-room the girl with the lamp retires, and the father and mother lay the basket and the earthen jars before the house gods on a raised stool, and mark the gods with sandal paste, and bestrew them with grains of rice and with flowers. The boy goes into the house and hangs his chaplet and marriage coronet on a peg. The same ceremony with the same details is performed at the girl's house. Planet-worship or grihamak is performed with the help of three six or twelve Brahmans. When everything is ready for the worship they think on the god Ganpati and the worship is begun. A leaf-plate is spread on a low wooden stool and on the leaf grains of rice and forty-one betelnuts are laid and worshipped. The father purifies himself by sprinkling his body with water dropped from a blade of darbha grass. A mound or altar is made of sand and sprinkled with cowdung and water. Fire, which some married woman brings from the house, is set on the mound, and the priest fans the fire, feeding it with cowdung cakes and pieces of firewood and repeating verses. Next comes the troth-plighting or vag-nischaya. The boy's father goes to the girl's house with musicians, kinspeople, the family priest, and servants carrying plates filled with ornaments and other articles. The plates contain a necklace called sari, a pair of

wristlets called *vaki*, and armlets called *tode*, a leaf-cup containing curds, milk, sugar, molasses, and betelnut and leaves, cocoanuts, copper and silver coins, rice, split pulse, two robes and bodices, a headcloth, turmeric powder and turmeric roots, two small metal cups with red and black powder, a leaf-cup with sandal powder, mango leaves, flowers, a cup ladle and plate, sweetmeat balls, a comb, a brass pot filled with oil, a brass ladle, sesamum seed or til, cumin seed or *jire*, and coriander seed or *dhane*.] At the girl's they are seated in the marriage hall on carpets, the begging and lay Brahmans always sitting apart. After the guests are seated the priests from both houses exchange cocoanuts and embrace. After the priests have embraced, the fathers embrace, and then the elder males of both houses exchange cocoanuts and embrace. A quartz square is traced in the marriage hall and low wooden stools are set in the square. The girl's father sits on one stool. Meanwhile the girl, on whose brow a flower garland has been fastened, with her head covered with a piece of broadcloth called aginpasoda, is led by her sister and seated on the stool close to her father. The boy's father sits in front of them with priests to his left repeating verses. The girl's father worships Varun the god of water. He takes a leaf-plate and spreads about a pound of rice over it. He takes a copper water-pot, marks it in five places with sandal powder, fills it with cold water, drops a betelnut, a blade of bent grass, and a silver coin into it, and over its mouth lays a bunch of mango leaves. Over the bunch of leaves he lays a leaf-cup filled with rice and on the rice a betelnut. To the betelnut, as representing the god Varun, he presents sandal paste, flowers, sugar, a packet of betelnut and leaves, cocoanuts, and cash, burns frankincense, and waves a lighted lamp, The fathers mark the brows of their priests with sandal and present them with turbans. They then mark one another's brows with sandal and exchange turbans. Then each of the fathers takes five betelnuts and five turmeric roots, and the girl's father ties them to the hem of the boy's father's waistcloth, and the boy's father to the hem of the girl's father's waistcloth. The fathers then hold the two bundles in which the turmeric roots and betelnuts are tied near each other, the priest rubs them with sand, and sprinkles water from the Varun pot over them. The contents of both bundles are mixed and made into one heap and distributed among good and respectable begging quests. Next Shachi or Indra's wife is worshipped. On a leafplate a pound or two of rice is spread and on the rice a betelnut is set and worshipped. At this Ganpati and Varun worship the money placed before the god by the girl's father is doubled by the father of the boy. The priest repeats verses, lays on the girl's right palm a drop of curds milk honey and sugar, and she sips it. The girl's sister ties a marriage ornament on the girl's brow and her priest tells the girl's mother and

her other relations that the boy's people have come to ask for the girl. They agree to let her go. The girl now leaves her place and sits on another stool in front of a picture of the house gods and throws grains of rice over it. The boy's father presents her with ornaments and clothes, and she walks into the house followed by the priest. She is dressed in the new clothes, the ornaments are put on her, and she is seated on a low wooden stool. The boy's mother lays before her a plate with rice, a betelnut and leaves, a cocoanut, redpowder, and a water-pot. In the house the boy's mother, or some one on her behalf, washes the girl's feet and wipes them dry with a towel, rubs turmeric on her hands and face, applies redpowder to her brow, and sticks rice grains over the redpowder. Then, telling the house people that she is filling the girl's lap, she drops into it a handful of wheat, a cocoanut, a packet of betel leaves, and some sweetmeat balls. The girl makes over the contents of her lap to some one close by, and walks away. The brows of the male guests are marked with sandal, the lay guests or grahasths are presented with packets of betel leaves and cocoanuts, and the begging priests or bhikshuks are paid 3d. to 6d. (2-4 as.) and all retire.

After the guests have left the priest takes a thread of the same length as the girl is tall, and adding to it a thread for every year the girl is old makes it into a wick, puts the wick into a lamp, lights the lamp before the god Gaurihar, and feeds it with oil brought by the boy's relations in the brass pot. What remains of the wick after the four wedding days are over, is carefully kept and burnt in the lamp at the worship of Mangalagauri which the girl performs in the month of Shravan or July-August. After the lamp is lighted the girl's mother is seated near it and the boy's mother begins to wash her and her relations' feet, but as the boy's side is considered higher than the girl's the girl's mother objects and the boy's mother desists. The girl's mother's lap is filled with a robe, a bodice, some rice, and a cocoanut, and the laps of her relations with rice only. [During the four marriage days the girl's lap is filled with wheat and not with rice H -409 part 1-7]

The *simantpunjan* or boundary-worship is generally performed when the boy crosses the border of the girl's village. When the boy and the girl live in the same village the boundary-worship is performed either in a temple or at the boy's house, either on the marriage day or on the day before the marriage. When the ceremony is to be performed at the boy's house, with the help of the priest, an elderly married woman of the girl's family takes bamboo baskets and trays and lays in them cocoanuts, rice, butter, curds, milk, honey, molasses, sugar, turmeric, redpowder, sandal, flowers, two pieces of bodicecloth which she makes

into a bag and fills with betelnuts and leaves, and two turbans, a sash, a chaplet of flowers, a ladle, a dish, a water-pot filled with warm water, a high wooden stool, a piece of broadcloth to spread over the stool, and some coppers. Meanwhile one of the girl's relations goes to call neighbours and kinspeople and another starts to tell the boy's parents that the girl's relations are coming. At the boy's in the middle of the hall a square is traced with redpowder and two low wooden stools are set in the square and covered with broadcloth. The girl's relations, with music and the articles mentioned above, go in procession to the boy's. First walk the musicians, behind them the women followed by the servants, and a few paces behind the male guests. At the boy's the men are seated on carpets and have pillows to lean against, and the women sit in the women's hall on carpets. The girl's priest sets the high stool near the two low wooden stools and covers it with a piece of broadcloth. The boy who is ready dressed, sits on the high stool, and the girl's parents sit on the two low wooden stools in front of him. The girl's father, taking a silver or leaf cup, fills it with rice grains, and setting a betelnut over it, worships it in honour of Ganpati; he then worships his family priest and presents him with a new turban. He now begins to worship the boy. The girl's mother takes the water-pot containing warm water, pours it first on the boy's right foot and then on his left, and the girl's father wipes his feet dry, marks his brow with sandal, and sticks grains of rice over it. He hands the boy a new turban, and the boy gives the turban on his head to some relation and puts on the new one. He is then handed a sash which he lays on his shoulders. The boy's sister is given a flower chaplet and she ties it from behind round the boy's turban. The girl's father lays on the boy's right palm a mixture of curds butter honey milk and sugar, which he sips, flowers and grains of rice are thrown over him, and a nosegay is placed in his hand. All the while the family priest repeats verses. The girl's mother washes the boy's sister's feet and presents her with a bodice. The girl's parents now leave their seats. The mother going into the women's hall, washes the feet of the boy's mother and his other kinspeople, fills their laps with rice and cocoanuts, and presents them with sugar. While this is going on in the women's hall, the girl's kinsmen mark the brows of the male guests with sandal, and present them with packets of betelnut and leaves and cocoanuts and the begging priests with coppers. Then the girl's kinspeople go home.

The same evening the girl's kinspeople, except her father who has to stay at home, start for the boy's with a richly-trapped horse, a couple of men with guns, and, on the heads of Kunbi servants and kinswomen, three to six bamboo baskets, plates, and pots covered with leaves. [The baskets contain four or five kinds of cooked]

vegetables, split pulse, wafer biscuits, flattened rice or pohe both sweet and sour, one or two kinds of preserves or koshimbirs in small cups, and a number of sweetmeats, salt pickles, butter, plantains, dates, sugar, and in a cup of spiced milk ten to twenty packets of betelnut and leaves, thirty to fifty plantain-leaf plates, rice, cocoanuts, turmeric and redpowder betelnut and leaves, two bodices, and one robe. Of the vessels holding these articles, one is a tapela or metal pot, one is a top or metal bowl containing split pulse, one is a vegetable pot, one is a plate or parat, and one is full of botvyachi khir that is dough-grains boiled in milk and sugar. Besides these there is a plate in which are a new turban and: shouldercloth and a rupee in cash. The uncooked food and other articles are given to Kunbi servants to carry; the rest are taken by kinswomen or if the family is well-to-do by Brahman clerks and cooks or dependants. Before the procession starts a Brahman is sent to the boy's. In the house he traces a square with redpowder and draws figures of men, animals, and trees. After the procession has left the girl's house, the girl is dressed in a yellow cloth called the bride's cloth or vadhuvastra and is seated near the marriage god or Gaurihar on a low wooden stool. A small bamboo basket with rice and sesamum is placed in her hand and she is told to sit in fronts of the god, throw a few grains over him, and repeat ' Gauri, Gauri, grant me a happy wifehood and long life to him who is coming; to my door.' [The Marathi runs, Gauri Gauri saubhagya de, dari yetil tyala ayusha de.] When they reach the boy's marriage hall, the men, of the bride's party sit either on the veranda or in the marriage hall, and the women go into the house and sit in the women's hall on carpets or mats which have been spread for them. They lay out the dishes and baskets, and one of them goes to the boy's kinswomen and asks them to come and see the food. A lighted lamp is placed near the dishes. The boy's kinswomen cluster round, and after they have looked at what has been brought they withdraw. When the women have gone one or two of the girl's kinsmen dressed in silk waistcloths go into the house, set about half a dozen stools in the place where the Brahman had drawn the tracings, lay out plantainleaf plates, serve the dishes, and ask the boy to dine. The boy's sister places a rupee under the leaf-plate from which the boy is to dine. The boy comes with a few unmarried boy friends of his, with a turban on this head and a chaplet of flowers tied to it, and takes his seat on the stool along with his companions. The man who serves puts a drop of butter on the palm of the boy's right hand, and he sips it; he is then given a plantain and spiced milk, and when he has eaten half of the plantain and drunk half of the milk the rest is taken home and offered to the girl. When dinner is over the boy rubs his hands on the leafplate and chews a packet of betel leaves and nuts. The rupee which

the boy's sister laid under the leaf-plate is taken by the girl's mother nominally for clearing away what the boy has left, though his leavings are generally taken by his own people.

Next comes the. *varaprasthan* or marriage-bidding. The girl's father accompanied by his priest goes to the boy's house, and laying a cocoanut in the boy's and his priest's hands gives them the formal invitation to his house to hold the marriage. The girl's father and his priest are each given a cocoanut and withdraw.

In the evening before the marriage the boy is dressed in the new turban and shouldercloth which were presented to him by the girl's relations, and his sister ties a flower chaplet to his turban. His family priest, who all the time goes on repeating verses, places a cocoanut in the boy's hand and leads him before his house gods, and the boy lays the cocoanut before the gods and bows low before them. He is next taken before the elders of the house and bows before each. Then he is led to the house door, and curds are thrice laid on the palm of his right hand, and he thrice sips the curds, and wipes his hand on his shouldercloth. Then his cheeks are touched with lampblack and redpowder, and he is taken outside by some near relation and seated on a horse, and his relations and friends form a procession to escort him to the girl's. In front of the procession are link-boys and Kunbis carrying torches; then come musicians of the Maratha, barber, or Ghadsi caste playing drums and pipes; the boy's sister carrying in her hands an earthen jar filled with cold water; in the middle the boy's mother carrying a brass plate with two lighted dough lamps; and on the left a near relation carrying a bamboo basket with a lighted brass hanging lamp resting on rice grains and folded round with a bodice. Then follows the boy on horseback with friends and torch-boys on either side followed by the women of his family, after whom the men bring up the rear. On the way, to quiet evil spirits, cocoanuts are broken and cast away, and, as the boy passes, people come out of their houses, wave brass lamps before him, and receive a cocoanut. When he reaches the girl's house, cooked rice, spread all over with redpowder, is thrice waved over the boy's head and thrown to some distance in the street. A married woman of the girl's house, bringing an earthen jar filled with cold water and with its mouth covered with a bunch of mango leaves and a cocoanut, marks it in five places with lime and spills the water over the horse's feet, and is given a bodice by the boy's relations, The boy is next taken off the horse and a married woman pours on his food milk and then water, and waves a lighted lamp before him. The girl's brother catches the boy by the right ear and he is presented with a turban. Then the girl's father carries the

boy into the marriage hall and seats him on a high wooden stool. After the boy is seated in the girl's marriage porch an astrologer, with a mixture of lime and redpowder, writes the name of the god Ganesh, the day, date, month, and year, and asks some married woman to smear with cowdung a spot underneath a redpowder drawing on the Wall and on the spot to trace a square with lines of quartz powder. The astrologer sprinkles grains of rice on the square and over the square hangs a pot full of cold water. A second pot is set near the first pot and both are marked with sandal paste in live places. He ties the pots together with a piece of thread and worships them. He then lets a cup whose bottom is pierced with a fine hole float on one of them, and seating both the fathers before the pots makes them worship them while be repeats verses. He then draws up two marriage papers, gives them to the fathers to worship, reads the papers, and makes them over to the fathers.

If possible before the boy and girl are married, if not soon after the marriage, the *madhupark* or honey-mixture ceremony taken place. The boy is seated on a high wooden stool and the girl's parents sit before him; the mother pours water over his feet and the father wipes them dry with a towel. The girl's father takes a ladle full of curds, milk, honey, and butter, and pours the contents on the boy's right palm who sips it. He is presented with clothes ornaments, and cash, and is led into the house. He is made to stand on a low wooden stool and the girl is set in front of him on a sahanpat or sandal-grindstone. A silk waistcloth is help between the boy and the girl by the priest on one side and his assistant on the other. The girl is given a garland of flowers to hold in her hands, and the boy a necklace of black glass bead. The priests begin to chant marriage verses, and when the lucky time is come the priests stop chanting and the cloth is withdrawn to the north. A bugle sounds, and, at the signal, the musicians raise a blast of music, the priests and quests clap their hands, the girl's father lifts the girl, and she drops the flower garland round the boy's neck, while he fastens the necklace of black glass beads round her neck. The priest gives the boy and the girl some handfuls of rice and they sprinkle the rice over each other's heads. The priests tell the boy and the girl to think on their family goddesses and then the boy and girl sit. When they are seated, a number of Brahmans, who are called from the marriage hall, repeat verses. The priest winds a thread round the couple, and breaking it in two equal parts, twists them into cords and tying each round a piece of turmeric root fastens one to the wrist of the boy's right hand and the other to the wrist of the girl's left hand. The begging Brahmans who take part are each given $\frac{3}{4}d$, to $\frac{1}{2}d$, ($\frac{1}{2}$ -1 anna). After the madhupark is over a quartz square is traced in the

women's hall and the girl's parents going into the god-room lay a betel packet before the gods, and bow to them. They than bow before the elders and the priest bowing to the quests, in a load voice, asks leave to perform the ceremony. The father and mother sit on the stools, bowing to the Brahmans who sit along with the family priest. Except the jewels which are to be presented to the girl, the rest of the ornaments are taken off her body. The articles presented to the boy are: A plate of gueen's metal, a water-pot and cup either of silver or brass, a brass lamp, finger rings, and if well-to-do a necklace, a cow, a female servant, and land. A few middle class families and some of the poor, who cannot afford to give so much, content themselves with a brass water-pot, and a cup, a lamp, and perhaps a gold finger ring.] A married woman rubs with sandal paste the brows of the priest, of the girl's father and mother, and of the boy and girl. Then all stand the priest holding a plate in his hand, and the girl, the boy, and the girl's parents standing round the plate. The boy holds out his open hands, the girl lays her half open hands in the boy's, who holds her thumbs with his. Over their hands the girl's father holds his open palm slanting and the mother pours cold water from a. jug on her husband's hand which falls on the hands of the boy and the girl, and from them drops into the plate. When this is done all sit and the girl's parents join their hands, repeating the names of the boy and girl, their fathers, grandfathers, great-grandfathers, and families. Then the two family priests, taking a plate with water and a silver coin in it and dipping mango leaves into the water, sprinkle it over the heads of the boy and girl repeating verses. The priest takes two threads and winds one thrice round the necks and the other thrice round the waists of the girl and boy. Then he makes them fit a little closer to each other so as to loosen the thread. Then the thread which was wound round their necks is pulled down over the feet and the thread which was wound round the waist is drawn up over the head. The threads are next wetted with cocoa-milk and rubbed with turmeric and the girl's priest winds one round the boy's right wrist and the boy's priest winds the other round the girl's right wrist. These are called marriage-wristlets or lagnakankans.

As soon as the astrologer has been presented with the hour-cups and the cocoanut the *sabha pujan* or guest-worship is performed for which invitations were issued the day before. The male guests are seated either in the hall of the house or in the marriage porch. Those who are *bhikshuks* or begging priests sit on one side of the room and the laymen sit on the other side; a few of the highest of each class are provided with pillows. In front' of the guests sit dancing-girls, and before the dancing-girls are laid silver plates with betel packets.,

flower garlands, nosegays, and sweet-smelling *davna* or Artemisia abrotanum and *marva* or sweet marjoram shrubs. There are also silver jars of rosewater and boxes of perfumery. A few of the host's friends rise from among the guests and hands the articles. Packets of betelnuts and leaves are given first to rich or learned laymen and priests and then to the rest; next each is given a flower garland, their clothes are sprinkled with rosewater, and their wrists are rubbed with scented oil. Besides these each wealthy layman is given a cocoanut and each learned cleric 1½d. to 4s. (1 anna - Rs. 15). Except the poor clerics all withdraw thanking the host for his hospitality, and receiving the host's thanks for their friendly attendance. The poor priests go into the yard, and as they leave the host gives each ¾d. to 6d. (½-4 as.). This is called *ramnyachi dakshana* or the toy-present. Each of the women guests is given a cocoanut and all retire.

Outside the house in a square tracing is placed a grindstone and in front of the stone a bathing tub filled with warm water. Around the stone are set five water-pots or *tambe* filled with cold water. The boy and the girl are seated on the stone and bathed. Married women sprinkle water from the five pots on the head of the boy and girl, and the boy, taking a mouthful of water, blows it over the body of the girl's sister and the girl on the body of the boy's sister. Wiping dry their bodies with a towel, the boy and girl dress in fresh clothes and are led into the house and seated on two low wooden stools, the girl to the right of the boy. Then, taking a necklace of black glass beads with a gold button in it, the boy worships it and fastens it round the girl's neck. Then, on a low wooden stool in front of him, the boy lays two pinches of rice and two betelnuts and turmeric roots, and worships. The rice is tied to the hems of the boy's and girl's clothes and after the marriage, ceremony is over is cast away.

For the *vivaha* or marriage which is also called *grahapravesh* or house-entering the boy and girl are seated on low wooden stools; near each other dressed in silk waistcloths and robes. In front of them an earthen altar is raised and on its four sides blades of *darbha* grass are spread. To its left are set four leaf-cups mango leaves and sacred grass, and, either in a new winnowing fan or on a leaf-plate, are placed parched rice grains, and behind them a sandal grindstone. In front of the boy are set a water-pot and cup and on each of his third fingers is put a ring of *darbha* grass. Fire is lit on the altar and fed with butter, with sacred sticks or *samidha*, and with bent grass or *durva*, and a little butter is sprinkled over the grain. The girl's brother comes and seats himself in front of the girl facing her. He puts two handfuls of parched grain into the girl's hands and the boy holding the girl's

hands in his left hand and covering them with his right, both the boy and the girl stand with their hands covered, and throw the parched grain over the fire. Then the boy, taking the girl's right hand in his own right hand, walks round the fire for the first time, and makes the girl stand on the sandal grindstone. After this the boy and girl take their seats on the wooden stools as before. He takes the girl's hand a second time and walks round the fire. At the time of taking the third turn the boy lifts the girl in his arms or sets her on his right hip and completes the third turn. The remaining parched grain the boy throws in the fire, pours more butter on it, and the ceremony is over.

After the marriage-fire or vivaha-hom comes the sapta-padi or seven steps. While the boy and girl are sitting on the stools the priest calls to the women and children in the house to come and see the husband lift up his wife, and as this is a funny sight all cluster round the couple. The sacrificial fire is rekindled. To the left of the fire seven small heaps of rice are made in a straight line and close by is set the sandal grindstone. The boy and girl leave their seats, and the boy thrice takes a handful of rice and throws it into the fire. He then lifts the girl, carries her on his left arm, and walks thrice round the fire. Before taking the third turn he sets the girl down, and standing behind her the girl's brother sets the boy's foot so that he pushes the girl's foot right over the heaps of rice, the priest repeating a verse when each step is taken. In return for the help he has given the girl's brother is presented with a turban. As soon as the seventh heap of rice is broken, the priest asks the boy's sister to press down the girl's big toe and for this service she is presented with a cocoanut. The bride now stands on the sandal-stone and the boy, lifting her as before, once more walks round the fire. When this turn is finished the boy and girl again take their seats on the low wooden stools and feed the fire with butter and parched grain. After the seven steps are taken the boy and the girl are taken outside of the house and the priest points to them the pole or dhruva star. They look at it, bow to it with joined hands, and coming back into the house feed one another. When the feeding is over small round betel-leaf parcels are given to the boy and girl. By turns they hold one end of the rolled leaf in their teeth and the other bites off the end. After this they play games of odds and evens, the boy is pressed to take the girl on his knee, and they are told to kiss each other.

Meanwhile the boy's female relations take offence and go back to the boy's house. After they have gone the girl's relations fill bamboo baskets with split pulse, wheat flour, a cup full of butter, molasses, a little bran and oilcakes, rice, scented oil, redpowder, and cocoanuts,

and placing them on the heads of servants, go to the boy's house, and fill the offended women's laps with grain pulse and cocoanuts, rub scented oil on their hands and redpowder on their brows, and ask them to come to their house to a feast. To please the boy, who like his female relations is supposed to be annoyed, the girl's brother and father bring a richly trapped horse to the boy's house. They beseech him to come back and dine, but he refuses and asks for ornaments or rich clothes. The girl's father agrees to give him what he wishes, and with the boy's kinspeople and friends returns in triumph to the girl's. Here the guests are all seated, and when dinner is announced all wash their hands and feet, put on silk waistcloths, and take their seats. The boy, wearing a new silk waistcloth, sits with the girl at the head of the male quests and they feed one another from the same plate. The women quests dine at the same time in a separate room. In front of the boy's mother a lighted lamp is set and she is asked to take her seat and break the wafer biscuit which is served on her leaf-plate. Then follows what is known as *ukhana* or metrical bantering. Most of the cleverness is in the rhymes which are lost in a translation. The girl's mother begins: In front was a niche in which was a frying pan, do not sulk, do not be proud, but eat at leisure. [Samor hota konada tyant hota tava, rusu naka, phugu naka, savakash jeva] The boy's mother answers, I step on a low sandalwood stool, what have you prepared that I may dine at leisure? [Chandanache patavar thevla paya, savakash jevayala kelet kaya The girl's sister says, In front was a niche in which was a drinking cup, to dine at leisure we have prepared sweet-gram balls. [Samor hota konada tyant hota gahu, savakash jevayala kele. bundiche ladu] The boy's sister answers, In front was a niche in which was a grain of parched rice, the balls you have prepared we do not like. [Samor hota konada tyant hoti lahi, amhala bundiche ladu avadat nahi. Some one from the girl's side says, In front was a niche in which was a grain of parched rice, to prepare more dishes of sweetmeats we have no means. [Samor hota konada tyant hoti lahi, yaj peksha pakvannavar chadh karavayas amhala milat nahi] One from the boy's side then gets angry and says, In front was a niche in which were avle fruits, in your banter how much folly there is. [Samor hota konada tyant hote avle, ukhane ghalatana kiti chevale ? From the girl's side, In front was a niche in which were pulse cakes, if you do not like pulse cakes eat pebbles. Samor hota konada tyant hote vade, tumhala ladu nahi avadat tar kha khade From the boy's side, Near the gate of the marriage hall was tied a fowl, the girl's sister is a tattler. [Mandavache dari bandhale kombade, navaremuli kadali karavali donhi kadache chombade. From the girl's side, In the front niche was a necklace, and from the boy's mother's hair-knot passed a Bhangi's household. [Samor hota konada

tyant hote gathle, vihiniche khopyatun gele bhangyache khatale] From the boy's side, In front was a niche in which was a plate, if households pass through the hair of our head why should you be ashamed? Samor hota konada tyant hoti tatali, amche khopyatun geli khatali, tenyha tumhala kan laj vatali ? From the girl's side, At the door of the marriage hall was a champaka tree, the girl's sisters are a band of dancing-girls. [Mandavache dari hota chapha, navaremuli kadalya karavalya kalavant nicha tapha From the boy's side, In front was a niche in which was a knife, from her way of tucking in the back part of her robe she truly is a courtezan. [Samor hota konada tyant hoti suri, kasatyachi niri tar kasbin khari. In this way they go on dining for hours and end in abuse. At last to close the Contest one of them says, In front, was a niche in which was a grain of parched rice, we do not wish to banter in the presence of men. [Samor hota konada tyant hoti lahi, amhi purusha-dekhat ukhane ghalit nahi. Among the men like scenes take place. They answer each other is verses or shloks.

Sunmukh or looking in the daughter-in-law's face comes after the offence-taking. The women of the boy's house take to the girl's a silver plate with ornaments and other plates and baskets containing a new robe, a bodice, cocoanuts, sugar, dates, almonds, turmeric, and redpowder. When they reach the girl's house the boy and girl are seated in the marriage hall on low wooden stools. The contents of the baskets and plates are shown to the women of the house, the boy's feet are washed by some elderly woman, and the girl is presented with turmeric and redpowder. The silver plate is set before the boy who takes from it a nosering and a necklace and puts them on the girl. Women relations deck the girl with other ornaments, dress her in a new robe and bodice, and fill her lap with wheat, cocoanuts, almonds, apricots, and dates, and the rest of the women are given turmeric and redpowder, pieces of cocoa-kernel mixed with sugar, and betel packets. The boy's mother and grandmother are presented with robes and bodices and his sisters either with bodices or with bodices and robes. After dinner the boy's relations return. Then comes the *sadi* or robe-giving when women relations and friends start from the boy's house with two plates, one with jewelry and the other with sixty-three betelnuts, turmeric roots, about a pound of rice, a cocoanut, a rupee in cash, a bodicecloth and a robe, and go to the girl's house accompanied by music. After a short time they are followed by the boy's father, brothers, and other relations and friends. When they are seated the priest sets two low wooden stools opposite each other. The boy and girl sit on the stools in a square marked by lines of quartz powder. One of the women relations places the plates which they brought near the boy, and he takes a nosering and puts it in the girl's nose and a

necklace and fastens it round the girl's neck. The boy's sister decks the girl with other ornaments, and dresses her in the new bodice and robe, and fills her lap with a cocoanut, sixty-three betelnuts, turmeric, and rice grains. A married girl should not remain at her parent's more than three hours after the robe-giving.

Next comes the *rasnhane* or festive bathing when the girl's mother bathes the boy's mother and other kinswomen at the girl's house, A swinging cot is hung in the back part of the house adorned with jingling bells and a plantain tree is set at each corner of the cot. Taking a present or amboan, the girl's mother and her kinswomen and friends go to the boy's house and seat themselves in the women's hall, and either the girl's mother or some other elderly married woman goes to the boy's mother and other elderly women and asks them to come to her house and have a bath. A low stool is set in the middle of the marriage hall, the boy's mother is seated on the stool, her feet are washed by the girl's mother with milk and water, and she is presented with a yellow robe and a white silk-bordered bodice. Turmeric and redpowder are handed to the boy's mother and other women and their laps are filled with rice and cocoanuts. All start in procession with music. Before they start the washerman spreads cloths for the women to walk on and continues lifting the cloths over which they have passed and laying them in front till the party have reached the girl's house. The washerman prevents the boy's mother putting her foot on the cloth until she gives him a present for removing the evils that overhang her head. This is called *ovalni* or keeping off. For this he is paid 2s. (Re. 1). As she moves, wreathed poles called nakshatramalas or star-garlands and abdegir palchhatras or quardian umbrellas are held over her head, and every now and again she is seated on a high wooden Stool in the street, and with other relations' her lap is filled and she is presented with turmeric and redpowder. Fireworks are let off, Sometimes guns are fired and torches are lighted, and musicians Sound, drums and fifes. With this pomp the procession passes to the girl's house. Near the door of the marriage hall the musicians stop the way and refuse to let the boy's mother enter until she pays them an ovalni or guarding fee, and she pays them about 2s. (Re. 1). Then the boy's mother refuses to enter the marriage hall unless the girl's mother pays her 2s, to 10s, (Rs. 1-5). When this is paid she goes into the hall. The girl's mother pours milk and water over the boy's mother's feet, presents her with turmeric powder and redpowder, and seats all the guests in the marriage hall. The boy's mother is seated on a low wooden stool, and the girl's mother, bringing a basket of rice, pours it over her head, and while she bends in getting up throws a robe over her shoulders. Then a square is traced in the marriage hall

and a low wooden stool is set in the square and a bangle-seller is asked to come with glass bangles of different colours and kinds. When the boy's mother has taken her seat the bangle-seller is asked to sit and the boy's mother throws a sash over him. Then he asks her what bangles she likes and takes her hand to try the size. But she refuses to let him put any glass bangles on her wrist unless she first gets gold bracelets. If the girl's family is rich they yield to her wish; if they are poor she has to be content with glass bangles. Then all the other women are presented with glass bangles. The cost to a rich family varies from £5 to £10 (Rs.50-100), to a middle-class family from £2 to £2 10s. (Rs.20-25) and to a poor family from 10s. to £1 (Rs.5-10). Then the guests, beginning with the boy's mother, are rubbed with spices and oils and bathed by the girl's mother and by female servants. After the guests have been bathed the girl's mother is rubbed with sweet scented powders and oils and her head with scented powders and cocoa-milk. She is seated on the swinging cot and a woman standing near swings the cot, and hence the name the swinging bath or *jhokenhane*. Sweetmeats are served, betel is handed, and the guests withdraw.

At the girl's house in the women's hall a quartz square is traced and three low wooden stools are set, two in a line and the third in front. The girl's maternal uncle brings the girl in his arms and seats her on a stool and the boy walks in and sits to the right of the girl. On the front stool a new waistcloth is laid, and, with the priest's help, the boy and girl worship the waistcloth by throwing turmeric and redpowder over it. When the worship is over her maternal uncle carries the girl in his arms to a mango tree. The priest follows and they sit on low wooden stools in front of the tree, worship it, and go back to the house. Then comes the airini or bamboo basket worship, when, in a square tracing, the boy and girl are seated on two low wooden stools and the girl's mother places a ring of twisted cloth on the boy's head and on the ring of cloth the father sets the basket with dough lamps in it. The girl is seated on the boy's lap and he drops a pinch of sugar into her mouth. She is then seated on the lap of the boy's priest, then on the boy's father's lap, then on the brother's lap, and they too drop a little sugar into her mouth. The boy and girl are then both seated on the girl's mother's lap and she puts sugar in the girl's mouth, and the ceremony ends. The robe and bodice the girl wore at the time of marriage are placed over the priest's hands and the boy worships them and along with a money present asks him to take them. The girl's father taking the girl in his arms goes into the marriage hall, and seating the girl by turns on the lap of the boy's relations says to each, ' This my daughter

whom up to this moment I have nourished as a son, do you now likewise nourish as your son.'

Within five days after the marriage day, generally in the evening, comes the *varat* or marriage procession. In the girl's house the boy and girl are dressed in rich clothes and seated on low wooden stools before the house gods. The girl's sister puts a little curds on the boy's right palm and he sips it. He takes from the god-room an image of the goddess Annapurna and hides it in his hand or in his pocket. The boy's sister ties together the hems of the boy's and girl's garments and they are seated on a horse, the girl in front of the boy. They start for the boy's house accompanied by men and women relations and friends with music and fireworks. On the way, if they pass a spot supposed to be haunted by evil spirits, a cocoanut is waved over the boy's and the girl's heads, dashed on the ground, and cast away. At the boy's house, when the boy and girl alight, the horse's feet are washed and cooked rice sprinkled with redpowder is waved round the horse's body and thrown to some distance. On the threshold the boy's sister sets a pot filled with rice, and when the boy and the girl come near the pot, the girl knocks it over with her foot. The boy's sister refills it and the girl knocks it over again. This is repeated a third time. Then the boy tells the girl that his sister wants their daughter. The girl promises that if she has seven boys and the eighth is a girl she will give her in marriage to her sister-in-law's son. Then the sister fills the bride's hands with rice, and, with the boy walking close behind her and bending over and holding both her hands from behind and with his thumbs from time to time forcing out grains of rice, she walks till they reach the room where the marriage gods are enshrined. Here the boy and girl sit on low wooden stools before the gods, and after performing some rites the boy's relations tell him the bride's new name and this he whispers into her right ear.

In the same evening at the girl's house is the *mandavapartani* or marriage booth-returning. A feast is given to the boy's relations when a variety of dishes are prepared, and the feast lasts all night to near daybreak. After the feast the boy and his father are presented with a turban and the boy's mother with a robe and bodice. The guests receive a betel packet and a cocoanut and withdraw. Next comes the *samaradhana* or festive entertainment a return feast given at the boy's house to the girl's relations when a dish or two more of sweetmeats are prepared than at the girl's house.

The closing rite is the guardian-unshrining or *devdevakotthapan*. When the feast is over, at the boy's house his parents along with the boy and

girl, and at the girl's house her parents alone, unshrine and bow out the marriage gods. The marriage gods are unshrined with the same details with which they were enshrined. The gods are brought out of the house in the same order in which they were taken, into the house. All are put in a plate and the water from the Varan-pot is sprinkled over the gods and on the girl and boy and on the boy's parents. The mango leaves are plucked off the twigs and thrown on the top of the marriage hall and some of the ropes that bind the roof of the marriage hall are loosened. Among rich Chitpavans the cost of a marriage varies from £150 to £250 (Its. 1500 - 2500); among the well-to-do from £50 to £100 (Rs. 500-1000; and among the poor from £10 to £25 (Rs. 100-250).

Coming of Age.

Garabhadhan literally conception is the ceremony at a girl's coining of age. A girl generally comes of age between twelve and fourteen. News is sent to the family astrologer and he is asked to say whether the time at which her sickness began was lucky or unlucky. [Almost always some ill luck attaches to the moment at which a girl's sickness begins. Of five hundred cases perhaps only one falls at an entirely lucky moment. Ill-luck may creep in from many sources, days, dates, months, planets, junction of planets, and colour of clothes. Under any of the following circumstances quieting or shanti rites should be performed. If the sickness began on a Saturday, Sunday, or Tuesday; if it began on the first, fourth, sixth, eighth, ninth, twelfth, or fourteenth of the lunar fortnight or on the day of full-moon; if it happened in. the month of *Chaitra* or March-April, *Jyesth* or May-June, A'shadh or June-July, Bhadrapad or August September, Kartik or October-November, and Paush or December - January; if any of the following stars was in the ascendant, the second the third, sixth, ninth, tenth eleventh, sixteenth, eighteenth, twentieth, and the twenty-fifth of the twenty-eight daily nakshatras or host-stars in the moon's monthly course round the heavens; if it happened during the first, sixth, ninth, tenth, thirteenth, fifteenth, seventeenth nineteenth, twenty-sixth or twenty-seventh of the fortnightly nakshatras or hoststars in the sun's yearly course in the ecliptic; if it happened during an eclipse; if it happened in the evening or at night; if her sickness began when the girl was asleep was wearing old clothes, was wearing red green or any fantastic coloured clothes, or if she was wearing no clothes at all; if it happened at a strange house or village, and if at the time the girl was holding a broom, sticks, grass, fire, or a winnowing fan All these occasions require a shanti or quieting ceremony.] If the moment was unlucky all sorts of calamities and troubles arise, and to

remove or prevent them, shanti or quietings have to be performed The chief of these is the *Bhuvaneshvari shanti* or the guieting of Bhuvaneshvari. When a quieting is wanted word is sent to married female neighbours, who come, and, without touching the girl, lay in her lap a turmeric root, a betelnut, and a handful of rice. Then a woman of the Maratha caste is sent to the houses of kinswomen friends and neighbours, and they are asked to come to the turmeric and redpowder or halad-kunku ceremony. A bamboo frame is set in the women's hall six feet long and two broad and a bangle-seller is called to adorn it with bangles. A high wooden stool is set in the frame, and the girl, dressed in now clothes and wearing ornaments is seated on the stool. Musicians play for four days for a couple of hours morning and evening, and a woman of the Maratha caste attends the girl day and night, washing her clothes, combing her hair, and sleeping with her. For three days the girl is given presents of cooked food, and the food is eaten by the girl, her maid, and the house-people. On the morning of the fourth day the girl is bathed and neighbours kinswomen and friends come with presents of a cocoanut, a betelnut, a piece of bodicecloth, and a handful of rice, and lay them in her lap. The girl's mother goes to the boy's house with uncooked food enough for the whole family, and cooking it with the help of the women of the house serves it to the boy's household. Before the dinner is begun her mother gives the girl 2s. to £1 10s. (Rs.1-15) in cash. On the fifth morning, or on any day within sixteen days from the beginning of the girl's sickness, learned Brahmans, the girl's parents, and near relations are called, and the boy and the girl are bathed. In the women's hall a square is traced with lines of quartz powder, and two low wooden stools are set in a line, one for the girl the other on the girl's right for the boy. A square altar of earth is raised in front of the boy and near it is laid a leaf-cup filled with grains of rice. On the rice is set a betelnut and the boy worships the nut as the god Ganpati. A sacrificial fire or hom is lit on the earthen altar and the same rites are performed as at a marriage, except the seven-steps or saptapadikraman and the polestar-seeing dhruvadarshan. When this is over the boy and girl leave their seats and go and sit in a square tracing on two low wooden stools, on the veranda or near the house steps. Another earthen altar is raised in front of them and the middle of each of its sides is adorned with a plantain stem. The boy then begins to kindle a sacrificial fire in honour of the goddess Bhuvaneshvari. He first takes some grains of rice in a leaf-cup, sets a betelnut on the rice, and worships the nut as the god Ganesh. Then the priest is given a betelnut and the boy makes a low bow before him and other Brahmans. The boy and girl leave their seats, the boy sitting on a low stool close by, and the girl going into the house and sitting among the women. The priest, sitting on the

stool on which the boy sat, mixes in a metal plate cowdung and cow's urine, curds, butter, water, and the sacred grass or durbha, and repeats verses and sprinkles the mixture over the earthen mound and round himself. When he has finished sprinkling the mixture he sprinkles mustard seed round him, and last of all water. To the east of the altar a square is traced and in the square are laid a couple of leaf, plates. Three heaps of mixed rice and wheat are laid in a line, and on each heap a water-pot is set, the pot on the middle heap being larger than the side pots. The priest fills the pots with water, and drops into each a little sesamum seed, some durva grass, the five jewels or pancharatna gold diamond amethyst emerald and pearl, the five leaves or panchapallav of the pipal (Ficus religiosa) umbar (F. glomerata) vad (F. indica) pimpri (F. infectoria) and mango, the five cow-gifts or panchagavya milk curds clarified butter cow-urine and cowdung,' the seven seeds bhat rice, jav barley, kang Italian millet, mug Phaseolus radiatus, sava Panicum miliare, til sesamum, and udid Phaseolus mungo, apta leaves, coriander seed or dhanya, the seven earths, [The seven earths or saptamritikas are: From the king's palace gate, from an ant hill, from under an elephant's foot, from under a horse's foot, from where four roads meet, from a cowshed, and from under the vala or Audropogon muricatum tree. and thirty-two healing roots and herbs. The pots are covered with metal lids and on each lid rice and a betelnut are laid. On the pot, close to each betelnut, is set an image, Bhuvaneshvari on the central pot, Adhidevata Indra on the right pot, and Pratvadhidevata Indrani on the left pot. The three goddesses are worshipped and each is presented with a robe and a bodice. The priest sits, on the stool on which the girl sat, and a married woman brings fire from the house and the priest scatters it on the altar along with firewood and cowdung cakes. Two pounds of cooked rice are brought from the house and kept close by, as are also four leaf-plates on which forty-two pinches of rice are laid with a betelnut on each pinch. Then to the north-east of the leaf-plates, which are called the *navagrahas* or nine planets, [The nine planets are the Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Rahu, and Ketu, is set a water-pot or kalash covered with mango leaves and a cocoanut. The *navagrahas* and the water-pot are worshipped. Then low wooden stools are set round the fire or hom and learned Brahmans sitting on the stools repeat verses and feed the fire with cooked rice, butter, sesamum, and samidhas or sacred sticks of the: palas (Butea frondosa), khed (Mimosa catechu), and other trees. Then the Brahmans take *durva* grass, wheat, and sesamum seed, and mixing cooked rice in milk and butter, feed the fire in honour of Bhuvaneshvari. Next a married woman takes a bamboo basket, and, laying a leaf-plate in it, brings about a pound of cooked rice and pours

it into the basket; and the boy, taking a little out of the basket, makes ten balls, and places one at each of the eight points of heaven, the east and south-east, the south and south-west, the west and northwest, and the north and north-east. He adds two more, one to the east the other to the north of the altar. He makes twelve more balls and sets nine near the *navagraha* and one each near the three goddesses. Over all the balls he throws a little *udid* pulse and redpowder or *gulal*. He makes twenty-three torches, twenty-two of them small and one of them large, he soaks the torches in oil, and placing one on each of the twenty-two rice balls or *mutkis* lights them. Then the boy and the girl take-their seats on two low wooden stools, and place the basket with the cooked rice before them and stick the big torch into the rice. The torch is lighted, redpowder is sprinkled over it, and a cocoanut and a betel packet are placed in the basket. The boy takes a pinch of rice in his hands, and says, 'To you Yaksha Brahmachari, Bhut, Pret, Pishachya, Shankini, Dankini, and Vetal and other evil spirits do I offer-this. May you eat it and depart in peace.' He then throws the rice over the basket. Then a Kunbi servant coming from the house with a blanket on his head lifts the basket in both hands, and after waving it thrice round the boy and girl sets it on his head, and, without looking back, lays it by the roadside at some distance from the house. The boy and girl wash their hands and feet outside of the house enclosure, return, and go into the house. The boy dresses in a short waistcloth or pancha and the girl in a bodice and robe, and they are seated on stools, the girl to the left of the boy. Then the priest and other Brahmans take water and a few mango leaves from Bhuvaneshvari's pot and from the mangoe leaves sprinkle the water over the heads of the boy and girl. The rest of the water is put in a bamboo or metal rovali or sieve and is held over the head of the couple. The boy's mother seats the boy and girl on stools, and either his mother or his sister rubs sweet powder on the boy's body and the girl's mother or sister rubs sweet powder on the girl's body. Both of them are then taken to the house well and bathed separately. After rubbing themselves dry the boy dresses in a rich silk waistcloth and the girl in a bodice and robe, and the clothes in which they bathed become the priest's property. Then the boy's and the girl's brows are marked with sandal and redpowder and they take their seats before the sacrificial fire and worship it. The boy then takes a pinch of ashes from the sacrificial fire and touches with it his own and the girl's brows. This part of the ceremony ends with a blessing from the priest and other Brahmans present.

Next to perform the conception or *garbhadhan* ceremony a square is traced with lines of quartz and two low wooden stools are set in the

square. The boy and girl, after bowing before the house gods and the elders, take their seats on the stools, and a married woman comes and touches the boy's, the girl's, and the priest's brows with red powder. The punyahavachan or holy-day blessing is performed with the same details as before a marriage, and the boy and girl leave their seats and go and sit near the sacrificial fire in the house. The fire is then rekindled and rice is cooked over it, and the boy places the rice along with a few mango leaves on his right. The boy takes a mango leaf in each hand, his wife lays butter on the two leaves, and the boy drops butter on the rice. She then washes her hands and more butter is thrown over the fire. They are now done with the sacrificial fire, which is put out either at once, or in the evening, or next morning. The boy and girl now rise, and taking flowers in their hands go out of the house and looking at the sun throw the flowers towards it. They then come in, take their seats near the fire, and the boy, laying his right hand on the girl's head, pronounces a blessing. The boy's sister hands the boy a small quantity of bent grass or durva, pounded wetted and tied in a piece of white cotton, and he, standing behind the girl and laying her head between his knees, with his left hand lifts her chin and with his right squeezes into her right nostril enough bent grass juice to pass into her throat. The girl leaves her seat, washes her hands and feet, and sits as before beside her husband. She once more leaves her seat and sits to the left of the boy when he either touches her breast or one of her shoulders and lays in her lap a cocoanut which rests on a turmeric root, betelnut, and wheat. The girl's mother and her relations, as well as the boy's mother and her relations, one after another, lay articles in the girl's lap and present both the boy and girl with clothes and ornaments. When the lap-filling is over the boy whispers his name into the girl's right ear. Then money is presented to Brahmans who ask a blessing on the heads of the couple, and they go and make a bow before the house gods and the elders. A feast is held, and as the girl is considered to have become pure, she is given" a cup of butter and serves it to the diners. In the evening, if the fire is allowed to remain, it is rekindled and fed with grains of rice and the boy rubs ashes on his own and on the girl's brows. A carpet is spread in the women's hall and the men and women relations take their seats. The girl is dressed in rich clothes and her head is decked with flowers. The boy is dressed in rich clothes, a coat waistcoat and turban, and they are seated face to face on the carpet. Male guests sit round the boy and female guests sit round the girl. Small round parcels of betel leaf are given to the boy and girl. The boy holds one end of the rolled leaf in his teeth and the girl bites off the other end. The boy is made to take the girl on his knee and bite a roll of betel leaf which the girl holds in her teeth. Jokes are made and they banter each other. The

girl then washes the boy's feet and marks his brow with redpowder and sandal. She puts a nosegay in his hands and spreads leaf-plates for the guests to eat sweetmeats and fruit. All begin eating and the boy and girl who sit at the head of the table feed one another and eat from the same plate. When all are done the girl hands the guests packets of betel and the boy either leads her by the hand or lifts her in his arms and takes her into the nuptial room. Next morning, if the sacrificial fire is still alight, the boy and girl bathe and rekindle it and then allow it to die.

Pregnancy.

A pregnant woman is treated with the greatest care and tenderness and both her parents and her husband's family try to give her whatever she longs for. She is considered particularly open to the attacks of evil spirits and is therefore as far as possible kept within doors, is forbidden from going into an empty house, from sitting under a tree, or from riding an elephant or a horse. She ought not to go into a house with an upper story, or sit on a mortar or pestle, or lot her hair hang lose on her back, or quarrel, or eat hot and pungent things, or weep, or sleep during the day, or lie awake at night. She ought not to draw lines with coal or with her finger nails on the ground. She ought not to sit with her feet turned back, and she ought not to cut anything during an eclipse. She should eat packets of betelnut and leaves mark her brow with redpowder, rub her arms with turmeric, put lampblack into her eyes, bathe, and comb her hair. If the mother attends to these rules the child becomes healthy and intelligent. If she suffers from loss of blood she should give a Brahman a sacred thread of gold, and the issue of blood will cease. As what the husband does during his wife's pregnancy is believed to affect his wife and the unborn child, ho avoids certain acts. He builds no house, does not bathe in the sea, attends no funerals, does not travel, and does not get his head shaved. These acts are forbidden to the husband of a pregnant woman because during her pregnancy a woman is specially apt to suffer from the attacks of spirits. The forbidden acts must therefore be believed to be specially likely either to enrage spirits or to bring them to the house. The reason for the different prohibitions seems to be that in building a house the anger of the place-spirit is aroused against the trespasser; the husband must not bathe in the sea because the seashore is thick with ghosts; he must not go to a funeral because the burning ground is the great haunt of spirits; he must not travel because he crosses boundaries another favourite, spirit haunt; he must not have his head shaved because, perhaps, an exorcist might get hold of the shaved stumps and through the stumps work

mischief in the house. These rules and examples are interesting as they throw light on the widespread practise of the lying-in father. This practise, which is commonly known by its French name couvad, may be described as various forms of invaliding the father instead of or as well as the mother. The practice occurs in Western India among the Pomaliyas or gold-washers of South Gujarat, who, after a birth, take great care of the husband, give him special food, and do not allow him to go out; among the Dombars and Lambanis of the Bombay Karnatak the husband is oiled and fed and keeps at home the wife doing all the work; among the Korvi basket-makers of Madras both men and women eat asafoetida after a bath (Tylor's Primitive Culture, I. 84); and in Seringapatam and on the Malabar Coast on the birth of the first daughter or of any son the father goes to bed for a month, lives on rice, takes no exciting food, and is not allowed to smoke. In Borneo the husband must eat nothing but rice and salt; he must do no hard work, fire no gun, strike no animals. In West Yunnan in China the husband takes to bed for forty days. In Europe traces of the practice of the lying-in husband remain in Corsica, North Spain, Beam, Navarre, and Biscay. The practice is very noticeable and elaborate in America. In Greenland both father and mother keep quiet; in North America the father gives up all active pursuits, fells no tree, fires no gun, and hunts no large game, but loafs at home in a hammock; in Guiana and other parts of South America the husband does no work, fasts, and may not use his nails in scratching; in California he is given nourishing food. In the West Indies the father takes to his hammock, eats and drinks nothing for five days, and for five more takes nothing but light beer. On the fortieth day he is cut with sharp teeth, his wounds are peppered and he is put to bed and kept in bed for several days. For six months he does not eat birds or fish (Tylor's Early History of Mankind, 291-305). Mr. Tylor (Ditto, 298) suggests as an explanation of these customs sympathetic magic that is the feeling that closely connected beings act on each other. The character of the acts forbidden to the Chitpavan husband, and the fact that diseases connected with pregnancy and childbirth are still in India almost universally believed to be the work of spirits, suggest that the explanation of all varieties of couvad is to be found in the early spirit theory of disease. The object of all the special treatment seems to be to prevent the father doing anything likely to displease spirits or give them the opportunity of fastening on him and coming home with him.]

The chief ceremonies which are performed during a woman's pregnancy are the man-bearing or *punsavan* in the second month, the quench-longing or *anavalobhan* in the fourth month, and the hair-parting or *simantonayana* in the sixth or eighth months. These

ceremonies should be performed at each pregnancy; if they are not performed at a woman's first pregnancy they cannot be performed on any subsequent occasion. On the day of the ceremony the wife and husband are anointed with sweet smelling spices and oils and they bathe. A quartz square is traced in the women's hall and two wooden stools are set in the square, and at some distance in front of the stools carpets are laid for Brahmans to sit upon. The husband and wife bow before the house gods and the male and female elders, and take their seats on the stools. A married woman marks the brows of the husband the wife and the family priest and retires, and the husband, taking in his hollowed right hand a ladleful of cold water, pours the water on the ground before him saying, ' I pour this water that the child in my wife's body may be a male and be intelligent, that he may live long, and that he may not suffer in the hour of birth, and not be possessed with bhuts, gans, and rakshasas, and may be happy and long-lived.' He next performs the quench-longing or anavalobhan ceremony that his wife may not wish for anything which is likely to cause a miscarriage. He then worships Ganesh and performs the holy-day blessing with the same details as during a marriage. Then an altar of earth is raised in front of the boy and the girl and the sacrificial fire is kindled with the same details as at the marriage or vivaha hom. After this the wife leaves her seat and stands behind the stool on which she sat, and into her hollowed hands her husband drops a grain of wheat with on each side of the wheat two grains of udid pulse. Over these three he pours a little curds. He then asks her thrice what she is sipping, and she answers that by which women conceive. The husband and wife go outside the house, wash their hands and feet, and sit as before on the low wooden stools. He places his right hand on his wife's head, and prays that the child may be born in the tenth month and may be a male. Next comes the hair-parting or simantonayana. The husband holds back the wife's head as he did when she came of age, and squeezes the juice of bent grass into her right nostril. He next takes a water-pot, fills it with water, and putting on a lid lays grains of rice on the lid, and over the whole sets a golden image of Vishnu. After the sacrificial fire is kindled he takes a porcupine quill and a blade of sacred grass, and passing them along the parting of his wife's hair fastens them into the knot behind. He takes a garland of wild umbar figs and hangs it round her neck, and decks her with ornaments and her hair with flowers. She is then seated on her husband's left and her lap is filled with fruit and wheat. Presents of clothes and ornaments are made to the husband and wife and they leave their places after the Brahmans have called blessings upon them. Money is distributed among the Brahmans and those who have not been asked to dine retire. From this time until after the child is born the wife is held

impure, and water and food are not taken from her hands. As at the coming of age the sacrificial fire is allowed to go out.

Atonement.

All-atonement or sarva-prayaschitta vidhi is generally performed by the mortally sick or the aged whose failing powers warn them that their end draws near. It is a sad rite. His friends, from day to day, try to persuade the sick or the aged to put off the atonement ceremony as there is no cause to fear the immediate approach of death. No one can make atonement without asking leave of his heir. If the sick is too ill to perform the rite, his heir can take his place. If a man dies without performing the ceremony, atonement can be made on the eleventh day after his death. On the morning of the day of atonement, the penitent bathes and dresses in a newly washed waistcloth and shouldercloth. He sits on a low wooden stool in the women's hall and in front of him sit on mats and carpets Brahmans among whom are a few learned divines or shastris and scripture-readers or puraniks. When the Brahmans are seated the penitent takes in his hands some copper coins and a water cup and ladle, and after walking round the seated Brahmans throws himself on his face before them, and with joined hands begs forgiveness. He rises and stands before them with joined hands. The Brahmans say: 'Tell us truly why you have called us and why you have bowed so low before us? 'The penitent, keeping his hands joined, answers: 'From my birth until now, either knowingly or unknowingly, with wish or without wish once or often, with body speech or mind, alone or in company, with touch or otherwise, by eating or refusing to eat, by drinking or refusing to drink, by eating or drinking with those of other castes, by tempting or by causing another to sin, by eating Or drinking from unclean vessels, by defiling a person from his caste in these and in other ways I have not ceased from sin. Do ye receive me, and by giving me atonement free me from the burden of my sins. He lies flat or bows before the Brahmans. He goes on: 'Do ye, who are able, free me, penitent, from the burden of my sins.' And a third time he bows or falls before them. He again rises and gives them the coppers he holds in his hands. He next goes into the house and brings out the money he intends to give the Brahmans, and putting it in a plate lays the plate before them. He worships the money and lays a sacred book before the plate, and throws grains of rice over the heads of the Brahmans. Then the Brahmans choose one of their number, who is either ignorant of the ceremony or whose love of money overcomes his scruples, and set him in front and call him the representative or anuvadak. The representative repeats the name of the host and his family stock and says: 'Except such grievous sins as

murder and adultery, I take on myself the sins of my patron and free him from them.' The penitent then gives the sinbearer a double share of the money in the plate besides uncooked food and other presents, and the sinbearer is told to leave the house bearing with him the load of the penitent's sins. After the sinbearer has gone, the host washes his hands and feet, sips a little water, and with joined hands returns thanks to the other Brahmans for freeing him from the burden of his sins. He asks them to allow him to be shaved and a barber shaves his head except the top-knot and his face except the eyebrows and pares his nails. The penitent goes to the house well, bathes, rubs his teeth with a branch of the aghada Achyranthes aspera, and again bathes. He rubs cowdung ashes on the palms of his hands and then with his right hand rubs ashes on his head, face, chest, private parts, and feet. He puts on more water and covers with ashes his whole body from head to foot and bathes. In this way he thrice rubs ashes and thrice bathes. He next takes cowdung and rubs it on his body from head to foot and again bathes. He takes earth and laying bent grass upon it, throws a little to the east, south, west, and north, towards heaven, and on the earth, and pouring a little water on the earth rubs the wet earth on his head, face, throat, chest, navel, shoulders, sides, armpits, back, thighs, legs, feet, and hands, and finally over his whole body. He takes more dust and bent grass, drops sesamum over them, and throwing them into the well prays to the well and bathes. He rubs cow's urine on his body, then cowdung, then milk, then curds, and last of all butter, bathing after each. He dresses in fresh-washed clothes, and going into the house, makes a clay altar, kindles a Sacrificial fire, worships Vishnu, and feeds the fire with cow's urine, dung, curds, milk, and butter, and drinks what of the mixture remains. He makes money presents to Brahmans and they retire. This ends the atonement except that unless he is ill the penitent eats nothing during the whole day. If he is ill, he can eat any food Which is not mixed with salt, for on this day salt is strictly forbidden. Women perform the all-atonement as well as men. The only difference is that no verses are repeated.

Death.

When a Chitpavan is on the point of death, a spot in the women's hall is cowdunged, holy basil or *tulsi* leaves are sprinkled over the spot, and a blanket is spread over the leaves. On the blanket the dying person is laid with his feet to the south. A few drops of the sacred Ganges or Bhagirathi are poured into his month; a learned Brahman repeats verses from the Veds, another reads the Bhagvat Gita, and near relations or the family priest ask him to repeat, Narayan Narayan. His son rests the dying head on his lap and comforts him until he has

drawn his last breath. When all is over the women of the family sit round the body weeping and wailing; the men and the boys go out and sit on the veranda bareheaded; servants or neighbours start to tell relations and friends, and the priest turns up his almanac to see whether the moment of death was lucky or was unlucky. To die under the constellations called tripad and panchak or under the last five of the seasonal stars or *nakshatras*, between the second half of Dhanishtha and the first half of Ashvini, is unfortunate. When the time of death is unlucky, to prevent calamity and trouble, quietings or shantis have to be performed on the eleventh day after death. Soon neighbours dressed in a waist and shouldercloth begin to drop in. One goes to the market and brings what is wanted for the funeral. When he comes back others busy themselves laying out the body. If the deceased was a Agnihotri or fire-sacrificing Brahman, some live coal is taken from the sacred fire, or a fire is kindled, and the live coal is put in an earthed pot. The chief mourner and his brothers, if he has brothers, and bathed one after the other outside of the house. The chief mourner takes a blade of the darbha grass, touches his brow with it, and passing it over his head throws it behind him. He dresses in a wet waistcloth and shouldercloth and sits in front of the barber and shifts his sacred thread to the right shoulder. [In performing ceremonies for the dead the thread is always shifted from its usual position on the left shoulder to the right shoulder; it is allowed to remain on the left shoulder in performing ceremonies to the gods. The barber shaves his head except the top-knot and his face except the eyebrows, and pares his nails. The chief mourner is dressed in a new waist-cloth, a shouldercloth or uttari is tied along with his sacred thread, a blade of darbha grass is tied round the sacred thread and the shouldercloth, another round the top-knot, and of a third he makes a ring and puts it on the third right finger. The body is brought out of the front door by the nearest male relations, followed by the women, and is laid on the outer steps of the house on a small wooden plank, the head resting on the steps. The women gather weeping round the head and the men stand at some distance. Three or four pots of cold water are brought from the well and poured over the body which is hidden from sight while it is being dressed. Elderly men bathe the body and leave it bare except a loincloth. [Elderly women dress a woman's body in a full suit of clothes. If the dead woman is married and is not a widow her hair is braided, redpowder is rubbed on her brow, and turmeric on her face and arms; nose, ear, head and feet ornaments are put on; butter is rubbed on her head; and her lap is filled with fruit and flowers. A piece of gold and an emerald are put in the mouth. A few drops of the sacred Bhagirathi river are poured into the mouth and sprinkled over the body, the two thumbs and the two great toes are

tied together with cloth, and the body is laid on the bier and covered from head to foot with a cloth. If the dead leaves children a hole is made in the face-cloth over the month. If the dead leaves a wife she is bathed in cold water, and says: 'Because of the great evil that has fallen on me, I shave my head.' She takes off such of her ornaments as are not to be given to the barber, or she pats on ornaments of little value, a small nosering, earrings, and silver toerings which are given to the barber, or instead of ornaments she gives him about 4s. (Rs. 15) in cash. The barber shaves her head and pares her nails. She breaks her bangles and her lucky marriage necklace, rubs off her red brow-mark, takes off her bodice, and puts on a white robe. The robe and the ornaments she wore at the time of shaving become the property of the barber. Her hair is wrapped in her bodice and laid on the bier. The chief mourner starts walking with the firepot hanging from a string in his hand. The bier is raised by four of the nearest kinsmen, set on their shoulders, and carried feet first close after the chief mourner. With the chief mourner walk two men, one holding a metal pot with the rice which was cooked near the feet of the corpse; the other carrying a bamboo winnowing fan with parched pulse and small bits of cocoa-kernel, which, as he walks, he throws before him to please the evil spirits. Of the men who have come to the house some follow the body bareheaded and barefooted, repeating with a low voice Ram Ram, Govind Govind. The rest go to their homes. The bearers walk slowly and the chief mourner keeps close in front that no one may pass between the fire and the body. No woman goes to the burning ground. Female friends take the women and the children of the house and bathe them, get the ground floor where the corpse was laid, the veranda, and the house steps washed with water and cowdung, and go home. Half-way to the burning ground the bier is lowered, and, without looking back, the bearers change places. When they reach the burning ground an earthen altar is made and the fire from the pot is poured over it. Instead of himself accompanying the funeral, the family priest sends another Brahman, generally one who officiates at the burning ground and who is known by the name of karta. [Kartas take their name from the Sanskrit karat a funeral rite. They are found among all Brahmans. They generally perform death ceremonies. The rest of the caste look down on the Karta, and they are seldom asked to conduct marriage and thread-girding or other lucky ceremonies. They eat, drink, and marry with the people of their caste, but are considered unclean in the same way that a mourning family is considered unclean. A few chips of firewood are thrown over the fire and it is fed with butter. Close to the platform, a spot of ground is sprinkled with water and sesamum seed is thrown over it. On this spot the funeral pile is built by the mourners and round the

pile blades of darbha grass are strewn. The pile and the bier are sprinkled with sesamum and water, the sheet is pulled off the body and thrown aside, the hand and feet cloths are cut and the body is laid on the pile with the head to the south. Pieces of sandalwood and basil leaves are thrown over the body, and, if the deceased died at an unlucky time, seven dough balls are made and laid on the head, the eyes, the mouth, the breast, and the shoulders. Then from a mango leaf butter is dropped on the several balls, and the loincloth is cut that the body may leave the world in the same state in which it came into the world. The chief mourner lights the pile, if the dead is a man at the head and if a woman at the feet, and the other mourners throw the rest of the fire under the pile. The chief mourner fans the fire with the end of his shouldercloth and throws a few sesamum seeds over the pyre. The karta or funeral priest all the while repeats verses. When the skull bursts the chief mourner, carrying on his left shoulder an earthen jar filled with cold water, takes his stand near where the head of the corpse lay, and another of the mourners picking a pebble makes with it a small hole in the earthen pot, and, from the hole 'as the chief mourner walks round the pyre water keeps trickling. At the end of the first round, when the chief mourner comes back to the south, a second hole is made with the stone, and a second stream trickles out. After the second round a third hole is made, and when three jets stream out, the chief mourner throws the pot backward over his shoulder and the water spills over the ashes. The chief mourner calls aloud striking his hand on his mouth, All the mourners come together and one of them ties round the pebble, with which the pot vas broken, a blade of darbha grass and calls it ashma that is the life. The chief mourner, to cool the spirit of the dead which has been heated by the fire, pours water mixed with sesamum on the ashes, and, to quench the spirit's thirst, pours water over the ashma or stone of life. The rest of the mourners follow the chief mourner and throw water over the stone, They start for home. Before starting, to allay the fear caused by burning the body, each picks a pebble and throws it towards the nearest mountain or hill. At the house of mourning the spot on which the dead breathed his last is smeared with cowdung and a lighted lamp is set on it. As the mourners come, to cool their eyes which have been heated by the fire, they look at the lamp and go to their houses. The chief mourner bathes, puts on a fresh waist-cloth, and lays in some safe place the waistcloth and shouldercloth he wore at the burning ground, the water-pot and cup, and the asthma or lifestone. As no fire is kindled in the house relations and caste-fellows send cooked food. If the chief mourner has brothers, before dining they rub butter on their right hands, make a ball of rice, set it in front of their leaf-plates, and pour water over it. The family of the deceased keeps

in mourning for ten days, during which they eat no betel or sugar and drink no milk. They are also not allowed to rub their brows with sandal or red-powder, to anoint their bodies, to shave their heads, or to wear shoes or turbans. Every day for ten days a sacred book, the Garud Puran or Vulture Scripture, is read to the family and the bearers are not allowed to dine until they have seen a star in the heavens. Generally on the third day comes the bone-gathering or asthisanchayan, when the chief mourner, accompanied by the Karta, goes to the burning ground with the waistcloth and shouldercloth he wore at the burning, the lifestone, and the water-pot and cup, and after washing the two cloths spreads them to dry. He bathes, puts on the fresh-washed waistcloth, and ties the shoulder cloth along with his sacred thread. He takes a little cow's urine sprinkles it on the ashes of the dead, picks out the pieces of unburnt bone, and heaps them on one side. When he has picked all the bones he pats them in a basket and throws them and the ashes into some neighbouring pond or stream. [If he has to take the bones to Nasik, Benares, or some other sacred spot, the chief mourner puts them in an earthen jar and buries the jar near his house in some lonely place where they are not likely to be touched. After a year he goes on pilgrimage and at the place of pilgrimage throws the bones into water.] When he has thrown the ashes into the water, he sits on the spot where the deceased's feet lay and raises a three-cornered altar or vedi. He sets an earthen jar in each corner of the altar and one in the middle, fills them with water, and throws a few grains of sesamum into each. Close to the jars he lays the stone of life. Near the four earthen jars he places four small yellow flags and in the mouth of each jar sets a rice ball. He makes eight dough balls shaping them like umbrellas and footprints and four cakes which he lays near the jars. The cake near the middle jar and the water in the middle jar are meant to appease the hunger and thirst of the dead, the dough umbrella is to shade him from the sun, and the shoes are to guard his feet from the thorns on the way to heaven. The cakes laid close to the corner jars are offered to Rudra, Yama, and the ancestors of the dead. He sprinkles sesamum and pours water over each of the balls and touches them with lampblack and butter. He dips the end of the shouldercloth into water, and lets a little water drop over each ball. He smells them, and, except the stone of life, throws the whole into water. Thus for ten days he performs like ceremonies that the deceased may gain a new body. On the first day the dead gets his head, on the second his ears eyes and nose, on the third his hands breast and neck, on the fourth his middle parts, on the fifth his legs and feet, on the sixth his vitals, on the seventh his bones marrow veins and arteries, on the eighth his nails hair and teeth, on the ninth all remaining limbs organs and strength, and on the tenth hunger and

thirst for the renewed body. On this tenth day a three-cornered earthen altar is made as usual, and the chief mourner sprinkles cowdung and water over it. Then, strewing turmeric powder, he places five earthen pots on five blades of sacred grass, three in one line and two at right angles. He fills the pots with water and a few grains of sesamum seed and over the seed sets a wheaten cake and a rice ball. He plants small yellow flags in the ground, and setting up the lifestone lays flowers before it, and waving burning frankincense and lighted lamps, prays the dead to accept the offering. If a crow comes and takes the right-side ball the deceased died happy. If no crow comes the deceased had some trouble on his mind. The chief mourner bows low to the lifestone, and tells the dead not to fret, his family and goods will be taken care of, or if the funeral ceremony has not been rightly done, the fault will be mended. In spite of these assurances, if for a couple of hours no crow takes the rice, the chief mourner himself touches the ball with a blade of sacred grass. Then, taking the stone, and rubbing it with sesamum oil, to satisfy the hunger and thirst of the dead, he offers it a rice ball and water, and standing with it near water, facing the east, throws it over his back into the water. This ends the tenth-day ceremony. On the morning of the eleventh day the whole house is cowdunged and the chief mourner and all other members of the family bathe. The priest kindles the sacred fire on an earthen altar and heaps firewood over it, feeds the fire with a mixture of cow's urine, dung, milk, curds, and butter, and that all the uncleanness caused by the death may vanish and the house become pure, the chief mourner and his brothers drink what is left of the five cow-gifts or panchagavya. The chief mourner rubs a little ashes on his brow and throwing a few rice grains over the fire lets it die.

On this eleventh day a quieting or *shanti* is performed to turn aside any evil that may befall the family if a member of it dies under the constellation called *tripad* or under the five planets or *panchaks*. In the women's hall an altar of earth is made and the mourner sits in front of the altar. Close by he lays a leaf-cup with rice grains in it, and over the rice a betelnut, and worships the betelnut as the god Ganesh. He empties a ladleful of water on the palm of his right hand, and pours the water on the ground saying 'I pour this water that the dead may go to heaven and no evil fall on his family.' He leaves his seat and asks the priest to begin the ceremony. The chief mourner sits somewhere close by and the priest sitting on the spot on which the chief mourner sat performs the worship. He takes mustard seed and sprinkles it all over the house, then cow's urine, and last of all cold water in which a blade of sacred grass has been steeped. Next he lays a couple of leaf-plates in front of the mound, spreads grains of rice

over the leaves, and over the rice sets five water-pots or kalashes, one at each corner and one in the middle. He covers the pots with lids, and on each lid sets grains of rice, a betelnut, and a golden image, The image on the middle pot is Yam, on the east pot is Rudra, on the south Varun, on the west Vishnu, and on the north Indra. Each of the images and water-pots is worshipped. A second betelnut is laid on the lid of the middle water-pot in honour of Ashtavasu, on the east water-pot in honour of Varun, on the south water-pot in honour of Ajaikpad, on the west water-pot in honour of Ahvibradhna, and on the north water-pot in honour of Usha. Round the middle pot fourteen betelnuts are arranged in a ring in honour of Yam, Dharmaraj, Nirrut, Antak, Vaivasvat, Kal, Sarvabhutakshaya, Audumbar, Dadhna, Nil, Paramesh, Vrikodar, Chitra, and Chitragupta, and all are worshipped. The priest kindles a sacred fire in honour of the nine planets or navagraha. Over the fire he cooks rice, and sprinkling sesamum over it feeds the sacred fire with butter. The priest takes a mango leaf, dips it into the water of the different pots, and from, the point of the leaf sprinkles water on the head of the mourner and his family. A metal cup is filled with boiled butter, the mourner and the rest of the family look at the reflection of their faces in the butter, and the cup is presented to a Brahman who walks, away with it. This ends the guieting or shanti ceremony. Except that three water-pots are set instead of five, the ceremony to quiet a tripad constellation is the same as the ceremony to quiet the planets. [A tripad constellation is one of which threefourths are included under one sign of the zodiac, Williams' Sanskrit Dictionary.]

On the same day, that is the eleventh day after a death, in the deceased's house, an earthen altar is made and a sacred fire kindled upon it. On the fire three metal pots are put, two of brass and the third of copper. The copper pot has rice and water, and one of the brass pots rice and milk and the other water and wheat flour. When the dishes are cooked, a water-pot is set in the middle of the platform, and on the pot a lid some grains of rice and three betelnuts and they are worshipped. The contents of the three pots are poured on three leaf-plates and with them the chief mourner feeds the fire. A male calf of a five-year old cow and a female calf of a three-year old cow are brought, new waistcloths are put on their backs, sandal and redpowder are rubbed on their brows, garlands of sweet basil and flowers are thrown round their necks, and their tails are dipped in a ladle of water and shaken over the head of the chief mourner. Next two irons, one three-pointed called a trishul the other ending like a key handle in a ring and called *chupti*, are laid in burning cowdung cakes. The male calf is thrown down with its legs tied near the sacred fire and when the

irons are red-hot ashes are rubbed above the joint of the calf's right forefoot and on the ashes the red-hot trident is pressed. Then the ringed iron is pressed on his hind quarters, and the calf is allowed to rise. The chief mourner walks round the calf, and looking to the four quarters of heaven tolls the animal that henceforth the four corners of the world are free to him and that he is at liberty to go wherever he pleases. He leads both the calves to the roadside at some distance from the house and sets them free. The lowing of the bullock when it is being branded is believed to carry the deceased to heaven, and his first cry opens the doors of heaven for the dead to enter. Poor people instead of a live ox make an ox of dough. After the bullock has been set free presents are made to Brahmans. One of the presents is a, cow which is called the Vaitarni cow because the dead is believed to cross that river of blood and filth by holding the cow's tail. Presents of other articles, food, water-pots, shoes, an umbrella, a lamp, cloth, sesamum seed, betelnut, flowers, butter, a sacred thread, and bedding, are also made to Brahmans. At the time of presenting the bedding a cot is placed in front of the house steps, and fitted with mattresses, pillows, sheets, and curtains. On one side of the bed is laid a plate filled with metal boxes for keeping betel, lime, catechu, cloves, cardamums, almonds, nutmeg, nutmace, musk, and saffron. The Brahman who is to receive this present is dressed in the deceased's waistcloth, waistcoat, coat, shouldercloth, turban, handkerchief, and shoes, and, if the deceased was an old man, a walking stick is placed in his hands. He is seated on a low wooden stool with his back to the cot, an umbrella is held over his head, and a fan is placed in his hands. The mourner sits in front of him, marks his brow with sandal, and asks a Maratha woman or other middle class woman to wait on the Brahman. The chief mourner then rubs scented oils and powders on the Brahman's body and lays before him flowers and grains of rice, burns frankincense, and waves a lighted lamp and camphor before him, and says to him:' I make you these gifts that the dead may 'be freed from his sins and reach heaven in safety, and that there all his lifelong he may have a cot to lie on, a packet of betel to eat, a maid to wait on him, an umbrella to shade him from the sun, and a stick to help him in walking.' The Brahman is seated on the cot with his feet resting on the ground, and the chief mourner washes his feet with water, rubs sandal on his brow, and presents him with 2s. to £10 (Rs. 1 -100). The Brahman lies on his back in the bed, the maid who becomes his property shampoos his feet, and the chief mourner, helped by other male members of the family, lift the cot on their shoulders with the Brahman on it, and, followed by the maid, carry it some distances from the house, and set it on the roadside, and, throwing a little earth and cowdung at the Brahman, return home, wash their hands and

feet, and sending some money as the price of the maid or *dasi* bring her back. The receiver of this present is considered the ghost or *pret* of the deceased. As it is most unlucky to meet a man who has taken such a present, the present is generally given to an outside Brahman who is not likely to come to the house or to be met in the streets. In some places the mourner and his friends sometimes carry the pelting of the present-taker with stones, earth, and dung so far that the police have to interfere. Like the Karta the cot-taking Brahman is not allowed to take part in lucky ceremonies or to join dinner parties. Besides the cot, several other articles, grain, pulse, and other necessaries of life enough to feed a family for a whole year, clothes, houses, lands, fields, and sacred books including the Bhagvatgita, Bharat, Ramayan, Pandavapratap, Bhaktivijaya, and Shivlilamrit are given to Brahmans. The sacrificial fire is kindled, and a number of *shraddhs* or funeral ceremonies are performed. This ends the eleventh-day observances.

Though, if necessary, it may be delayed for a year, the sapindishraddh or memorial service in honour of seven generations of ancestors, generally takes place on the morning of the twelfth day after the death. As a rule, the ceremony is held in the cattle-shed where the dishes are cooked by some elderly woman. In the morning the chief mourner bathes and takes his seat in the stable, and the family priest, sitting near him on a low wooden stool, begins to repeat verses The mourner takes three bits of plantain leaf or *chats* and lays them in a line facing north as the seat for his grandfather, great grandfather, and grandfather's grandfather, two leaf-seats facing east for the gods Kuldev and Kamdev, and a leaf-seat facing north-east for the deceased. Before the priest are a cup, a saucer, and a ladle full of water. He dips blades of the sacred darbha grass into the water and from the point of the blade sprinkles water over each of the leaf-seats. He takes two more blades of grass, twists them in rings, and draws them over his third right and left fingers. He ties a blade of the grass to his top-knot and another round his sacred thread. He takes a blade of the grass and a little barley and tucks them into the right side of his waistband, and a blade of the grass and a little sesamum seed into the left side of his waistband. Under his seat he lays four blades of grass, and joining his hands repeats the names of Kuldev and Kamdev. He changes his sacred thread from the left to the right shoulder, repeats his father's name and family, and the names and family of his grandfather, great-grandfather, and grandfather's grandfather, and moves his sacred thread back to its usual place on his left and shoulder. He takes a bundle of darbha grass, six copper coins and some sesamum seed and barley, and leaving his seat goes round the six leaf-seats or sacred grass images representing Brahmans to pay

the homage due to them. [If the mourner is well-to-do be has Brahmans to sit instead of the pieces of plantain leaf. Then, standing and looking towards the grass images, he asks them if he is fit to perform the ceremony. He takes his seat and holding seven blades of darbha grass lays two on the leaf-seat of Kuldev, two on the leaf-seat of Kamdev, and three on the leaf-seat of the deceased. He sets before him two plates, half fills them with water, and throws in the one a little sesamum and in the other a little barley. In each plate he lays a blade of darbha grass, a betelnut, and a copper coin, and sprinkles water from the plates over his head. He leaves his seat, sprinkles water over the cooking dishes, and asks the cook whether the food is ready. When the food is ready the mourner again sits and throws grains of rice and sesamum on all four sides of him to quard himself and the ceremony from evil spirits. The chief mourner faces the grass images of Kuldev and Kamdev, throws sesamum and barley over them, and sprinkles the spot in front of the two images with water from the three plates, throws two blades of darbha grass over the two spots which he had sprinkled with water, and taking two plantain-leaf cups sets them on the blades of grass. He sprinkles water over the cups and lets them run over. He lays two blades of darbha grass across the cups, pours a ladleful of water into each, throws sandal paste, barley, and basil leaves into them, and asks the two gods to accept them. He takes four grains of barley, touches the grass images with his left hand, and drops some grains over them from his right hand. He covers them with his left hand, and, taking the two-blades from over the cups, lavs them on the leaf-seat. He takes each cup and touching the leaf-seat with his right hand pours the contents over his right hand, and sprinkles more water from the three plates over the leaves. He shifts his thread to his left shoulder, repeats the name of his father and the family name, and throws a blade of darbha grass and a few sesamum seeds over the leaf seat of the deceased, and over the seats of the grandfather, great-grandfather, and grandfather's grandfather. He sits in front of the deceased's leaf, sprinkles water before it, turns the cup rim up, lays four blades of darbha grass across the rim, and pours into the cup a ladleful of water from the plate mixed with basil leaves, sandal powder, and sesamum seeds. He treats the leaf-seats of the grandfather the great-grandfather and the grandfather's grandfather in the same manner, lays three blades of darbha grass across the rim of each of the three cups, pours, a ladle of water into each, and taking in his hands some grains of sesamum and repeating his father's name and his family name throws some sesamum into each of the four cups. He says, 'I unite my dead father with my grandfather, my greatgrandfather, and my grandfather's grandfather.' He takes a ladle of water from his father's cup and a blade of darbha grass from each of

the four cups and pours the water in front of one of the three cups and lays the blade near the cup. He treats the other two cups in the same way. Then, taking a ladle of water from each of the three cups, he sprinkles a little over the blades, and empties the other two cups over the leaf-seats. He gathers all the blades from the two cups and lays them on the first of the three cups and throws the cups in a corner along with his father's cup. He shifts his thread from the right to the left shoulder, drops sandal and flowers over the leaf-seats of Kuldev and Kamdev, and burns frankincense and camphor before them. He worships the father's and the ancestor's leaf-plates, makes a square of water in front of Kamdev's and of Kuldev's cups, shifts his thread to his right shoulder, and drops water in a ring in front of each of the three forefathers' plates, and in the form of a triangle in front of the father's plate. He spreads leaf-plates over all the water lines and draws lines of ashes round the four ancestral plates, and lines of flour or quartz powder round the two gods' plates. He rubs butter on the six. leaf-plates beginning with Kuldev's and Kamdev's plates. Fire is brought and a little cooked rice is thrice thrown over the fire. If Brahmans are seated on the four leaf-seats of the deceased, and of his father, grandfather, and great-grandfather, the cooked rice is given to them and they swallow it, but, as rich presents are required before Brahmans will agree to eat the cooked rice, a blade of darbha grass is generally set to represent them and to receive the homage due to them. A leaf-plate filled with heaps of rice, vegetables, sugared milk, and cakes is laid before the leaf-seat of Kuldev and a second plate before the leaf-seat of Kamdev, and water from the three metal plates is sprinkled over them. A ring of water is poured round each of the plates, and the mourner, resting his right knee on the ground and pointing to the food with his right thumb, says, Idam anam, that is ' This is food.' He shifts his thread to his left shoulder, rests his left thigh on the ground, and points with his left thumb to the four leafplates, which are laid in front of the four ancestral leaf-seats. He drops a little honey on each of the four leaf-plates, and says to the ancestral spirits or pitris, 'Are you satisfied with the food.' He throws a little water in front of the six plates, and sprinkles some grains of rice over them. He lays down a blade of darbha grass and offer sugared milk as food to those of his family who may have died in the womb, been buried, or been burnt without due ceremony. The images are asked if they have had enough, and if they have had enough, what is to be done with the remaining cooked rice. The mourner is told to roll the rice into balls or pinds. He takes the cooked rice and makes some of it into a rolling pin and of the rest he makes three rice balls. He sits facing the south-east, sprinkles a little water to the right in front of him, lays blades of darbha grass on the water, and lifting the pin from

before him sets it on the grass. To his left he sprinkles a spot with water and on the spot lays three balls on blades of grass. These throe balls represent the mourner's grandfather, his great-grandfather, and his grandfather's gandfather. He sprinkles water on the leaf-plate which represents his father's spirit and worships it with sandal paste, basil leaves, and sesamum, and prays it to be freed from its present state and to be gone for ever. He then takes a little water on the palm of his right hand and says, 'I now mix or join my dead father with his dead forefathers.' He takes nine blades of darbha grass, twists them into a cord, and ties the two ends by a knot. Catching the knotted string between the four fingers of both his hands, he sets it on the rice rolling pin, and closing his eyes, and repeating Vishnu's name, presses the string on the pin, and divides it into three equal parts. He takes the nearest part of the pin and makes a cup of it, and laying some honey and curds in the cup, drops one of the three balls into it and closes it repeating, ' I unite this first part of the dead or *pret* with my grandfather," and lays the piece of the rice rolling pin on the spot from which he picked it. He takes the middle part of the rolling pin, forms it into a cup, and putting in the cup the ball which represents the greatgrandfather, closes the month of the cup saying, ' I unite the dead with my great-grandfather.' He treats the third part of the pin in the same way as the first two parts saying ' I unite the dead with my grandfather's grandfather.' He pours a ladle of water over the first ball and says 'I offer water in the name of my father.' He pours water over the second and third balls saying,' I offer water in the name of my grandfather and of my great-grandfather.' Up to this time the deceased has been a ghost or pret. The ghost now changes into a guardian spirit or pitra that is father, and unites with the mourner's pitamaha or grandfather, and his prapitamaha or great-grandfather. The grandfather's grandfather ceases as the relationship stops with every fourth person. The mourner rubs a little butter on the three balls, marks thorn with lampblack, puts a thread from his waistcloth over them, and lays round them the utri or cloth which was tied with his sacred thread on the day of his father's death. If the mourner is over eighty-five he plucks a few hairs from his breast and lays them on the balls. The cooking pots used during the ten days of mourning are presented to the priest, and in front of the three balls are laid flowers, holy basil, sandal paste, and grains of rice; frankincense and camphor are waved before the balls and they are offered cooked food. All members and near relations of the family, men women and children, draw near the three balls, bow before them, and ask their blessing. The grass figures or chats and the balls are asked to take their leave, the water from the plates is thrown over the balls, and the Brahmans are presented with uncooked food and money. The mourner

is now pure and free from taint He gathers the balls and leaf-plates, puts them in a pot, cleans the place, and sprinkles barley and sesamum water on the spot where the balls were. He throws the whole into water. The priest touches the brow of the mourner with sandal paste and blesses him, saying: May you live long and gain as much merit from the ceremony as if it had been performed in Gaya itself.' Either on the same or on the following day another offering or pathaya shraddh is performed. The mourner sets two leaf-plates facing east and north and lays a blade of darbha grass on each. He sets before him a few blades of the sacred grass and over the grass three dough or rice balls in the name of his father, his grandfather, and his greatgrandfather, and worships them, presenting them with shoes, clothes, an umbrella, food, and a jar with cold water in it, to protect them in their journey to heaven from thorns and from cold, heat, hunger, and thirst. The presents are handed to begging Brahmans and the ceremony is over.

On the morning of the thirteenth day after a death, the mourner anoints his hair with oil and bathes. He rubs sandal paste on his brow, sits on a low wooden stool with the priest close to him, and, except that a lamp is kept burning near him, has all the fire and lights in the house put out. He sets a betelnut on a pinch of rice in a late and worships the nut as the god Ganesh. He sets close to him a water jar called the Soothing Pot or shanti kalash, and puts into the pot water, mango leaves, bent grass, a betelnut, and four copper coins, and, taking a ladle of water in his right hand, says, 'I perform the ceremony for myself and my family to be made happy hereafter and not be troubled with like troubles.' Four Brahmans sit round the water-pot each with a blade of the sacred grass in his right hand and touch the water-pot repeating verses. The water is poured into a plate and the four Brahmans, dipping in mango leaves, sprinkle the water from the leaf-tips on the heads of the chief mourner, all members of the family and the entire household, and in every corner of the house and over the furniture. With the help of the lamp fire is kindled in the ovens. A money present is made to the four Brahmans varying according to the mourner's means, from a couple of shillings to five or ten pounds. The priest rubs redpowder on the mourner's brow, sticks rice grains on the powder presents him with a new turban, and the relations and friends follow offering turbans. The mourner takes a whole betelnut, and with a stone breaks it on the threshold of the front door, a practice not allowed on any other occasion, and chews a little of it. The priest, laying a little sugar on a leaf, hands a morsel to the mourner and to each member of his family. A feast is held to which the four corpsebearers are specially asked, but people whose parents are living do not attend the feast. The mourner, dressed in a now turban, is taken to a temple, and after making a bow is brought back to his house and the guests take their leave. On the sixteenth day the mourner performs a ceremony that the dead may not suffer from hunger and thirst. After this the ceremony is repeated every month for a year and at least one Brahman is feasted. On the death-day and on All Souls' Night or Mahapaksh in Bhadrapad or August-September, when the dead are supposed to hover about their relation's houses looking for food, the service is repeated and Brahmans are fed.

The special rites practised at the marriage of a man who has lost two wives, and the special funeral services performed for an unmarried lad, for a woman who dies during her monthly sickness, for a pregnant woman, for a lying-in woman, for an heirless man, and for a child under two are given in the Appendix.

DESHASTHS.

Deshasth Brahmans are returned as numbering 32,749 and as found over the whole district. They take their name from desk or the country and are called Deshasths apparently in the sense of local Brahmans. They are generally dark, less fine-featured than Chitpavans, and vigorous. They speak pure and correct Marathi. The men dress in a waistcloth, coat, waistcoat, turban, shouldercloth, and shoes or sandals, and rub their brows with red or white sandal. They wear the top-knot and mustache, but not the whiskers or beard. The women wear the fullbacked bodice and the full Maratha robe with the skirt drawn back between the feet and the end tucked in at the waist behind. They generally mark their brow with a large red circle and braid the hair tying it so as to form a knot at the back of the head, and over the knot an open semicircular braid of hair. They are clean, neat, generous, hospitable, hardworking, and orderly. They are husbandmen, landholders, traders, shopkeepers, moneylenders and changers, Government servants, and beggars. They are either Smarts that is followers of Shankaracharya the apostle of the doctrine that the soul and the universe are one, or Bhagvats that is followers of the Bhagvat Puran who hold the doctrine that the soul and the universe are distinct. They worship all Brahmanic gods and goddesses and keep the ordinary fasts and festivals. Their priests belong to their own caste. They make pilgrimages to Alandi, Benares, Jejuri, Nasik, Pandharpur, and Tuljapur; and believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. A family of five spends £1 4s. to £2 (Rs. 12-20) a month on food, and £2 to £10 (Rs. 20-100) a year on clothes. A house costs £50 to £300

(Rs. 500-3000) to build, and 2s. to £1 (Rs.1-10) a month to hire. The furniture and household goods are worth £10 to £200 (Rs. 100 -2000). A birth costs 10s. to £3 (Rs. 5 - 30); a hair-clipping 10s. to£l 10s. (Rs.5-15); a thread-ceremony £2 10s. to £20 (Rs. 25-200); a boy's or a girl's marriage £10 to £200 (Rs. 100-2000): a girl's coming of age £2 to £5 (Rs.20 -50); and a pregnancy £1 10s. to £10 (Rs.15-100). Their customs are generally the same as those of Konkanasth Brahmans. [Fuller details of Deshasth Brahman customs are given in the Sholapur Statistical Account. When a girl comes of age she is dressed in rich clothes and taken to her husband's accompanied by music and female relations. At his house she is seated for three days in a wooden frame and presented with cooked dishes by her near relations and friends. On the fourth day she is bathed and presented with new clothes, and joins her husband. On the birth of a child the father puts a couple of drops of honey and butter into its mouth in presence of his and his wife's relations. The mother's term of impurity lasts twelve days at the end of which she is bathed and becomes pure. On this day the child is laid in a cradle and is named. When four months old the child is taken out of the house to see the sun, and after it is five or six months old it is fed with cooked rice. When between one and three years of age, if the child is a boy, his head is shaved, and between his fifth and his eighth year he is girt with the sacred thread. They marry their girls before they are ten and their boys before they are twenty. The girl's father has to look out for a husband for his daughter. They burn their dead, do not allow widow marriage, and practise polygamy. They have caste councils, and along with Chitpavans, Devrukhes, and Karhadas, form the local community of Brahmans. They send their boys to school and are a well-to-do and rising class.

DEVRUKHES.

Devrukhes, or inhabitants of Devrukh in Ratnagiri, are returned as numbering 175 and as found all over the district. They say they are Deshasths and are called Devrukhes because they went to the Konkan and settled at Devrukh in Ratnagiri. They have no divisions, and their surnames are Bhole, Dange, Ghondse, Joshi, Junekar, Mule, Padvale, Shitup, and Sobalkar. Families bearing the same surname can intermarry. They look like Deshasths, and both the men and women are strong, stout, and healthy. In speech, house, food, and dress they do not differ from Deshasth Brahmans. They are neat and clean, hospitable, thrifty, and hardworking. They are writers, lawyers, moneylenders, and religious beggars. They hold a low position among Maratha Brahmans as neither Deshasths nor Karhadas dine with them.

Some are Rigvedis and others Yajurvedis, and they have fifteen stocks or *gotras* of which the chief are Atri, Bharadvaj, Gargya, Kashyap, Kaundinya, Kaushik, Jamadagni, Shandilya, Shavnak, and Vashishta. Their religious and social customs do not differ from those of Deshasth Brahmans. They marry only in their own class. They have a caste council and settle social disputes at meetings of the castemen. They send their boys to school and as a class are well-to-do.

DRAVIDS.

Dravid or South India Brahmans are returned as numbering thirty-seven and as found in Haveli, Khed, and Poona. They cannot tell when and from what part of the country they came to Poona. They look like Deshasth Brahmans and speak Marathi. In house, dress, and food, they resemble Deshasths. They are writers, moneychangers, and religious beggars. They are Smarts in religion and have house images of Bhavani, Ganpati, Krishna, Mahadev, Maruti, and Vishnu. Their high priest is Shankaracharya Svami of Shringeri in Maisur, the head of the sect of Smarts. They have no special ceremony on the fifth or the sixth day after the birth of a child, and do not make the boy eat from the same plate as his mother before he is girt with the sacred thread. With these two exceptions their religious and social customs do not differ from those of Maratha Brahmans. They have a caste council, send their boys to school, and are a steady class.

GOVARDHANS.

Govardhans, or people of Govardhan in Mathura, also called Golak or illegitimate and Gomukh or Cow-mouth Brahmans, are returned as numbering 600 and as found over the whole district except in Purandhar. [In the Nasik Statistical Account (Bombay Gazetteer, XVI, 41) reasons are given for suggesting that the Govardhan Brahmans of Nasik, Nagar, Poona, and the North Konkan are not illegitimate Brahmans, but are an old settlement of Brahmans at Govardhan near Nasik, who were ousted by Yajurvedis from Gujarat and Deshasths from the Deccan, and who perhaps continued to practise widow marriage after the later Brahmans had ceased to allow it, They cannot tell when and whence they came, but believe they have been in the district upwards of two hundred years. They belong to three family stocks, Bharadvaj, Jamadagni, and Sankhayan. Families belonging to the same stock do not intermarry. Their commonest surnames are, Agyan, Bhope, Ghavi, Jvari, Lakde, Makhi, Murle, Range, Shet, and Tapare; families, bearing the same surname intermarry. The names in common use among men are, Balvant, Ganpatrao, Narahari,

Rambhau, Vaman, Vinoba, and Vithoba; and among women, Bhagirthi, Gangu, Kusha, Manubai, and Saibai. They look and speak like Deshasth Brahmans, They live in houses of the better sort, one or two storeys high with walls of brick and tiled roofs. Their goods include boxes, swings, cots, cradles, chairs, benches, carpets, pillows, bedding, blankets, glass globes and wallshades and metal lamps, and cooking and drinking vessels. They keep servants, cattle, and parrots. Apparently with truth they claim to be strict vegetarians. Other Brahmans do not drink water which a Golak has touched or eat food which he has cooked. A family of five spends 14s. to 18s. (Rs. 7-9) a month on food. They give gram ball or sweet cake feasts in honour of thread-girdings, marriages, and deaths which cost 4½d. to 7½d. (3-5) as.) a guest. They dress like Deshasth Brahmans, and the Govardhan women like Deshasth women do not deck their hair with flowers. Both men and women are untidy, but they are frugal and hardworking. They say they were formerly priests to Brahmans and other Hindus and had the right of marking the time at marriages and that their ancestors mortgaged the right to Deshasth Brahmans. They are husbandmen, moneylenders, moneychangers, and astrologers, and some act as priests to Kunbis and other poor people. They earn 12s. to £2 10s. (Rs. 6-25) a month. They consider themselves equal to other Maratha Brahmans, but other Brahmans treat them as Shudras and do not eat or drink with them. Among them a house costs £20 to £40 (Rs.200-400) to build and about 4s. (Rs.15) a month to rent. The value of their goods varies from £10 to £80 (Rs. 100-800), their servants' wages with food amount to 1s. to 4s. (8 as.-Rs.15) a month. Clothing costs £2 to £3 10s. (Rs.20-35) a year; a birth 16s. to £1 (Rs.8-10); a hairclipping 2s. to 4s. (Rs. 1-15); a thread-girding £2 10s. to £7 10s. (Rs.25- 75); a boy's marriage £10 to £20 (Rs. 100-200); a girl's marriage £2 10s. to £5 (Rs. 25 -50); a girl's coming of age costs her husband's father £1 to £2 10s. (Rs.10-25), and her own father £1 to £5 (Rs. 10 - 50); the pregnancy feast costs the boy's father 10s. to £1 (Rs.5-10); and the death of a man £1 to £1 4s. (Rs.10-115), of a married woman £1 to £1 10s. (Rs.10-15), and of a widow 12s. to £1 (Rs.6-10). They worship the ordinary Brahmanic gods and goddesses, especially Bhavani, Bhairoba, and Khandoba. They keep all Hindu fasts and feasts and call Deshasth Brahmans to officiate at their houses, but do not perform Vedic rites. They go on pilgrimage to Alandi, Benares, Jejuri, and Pandharpur. When a child is born *nimb* Azadirachta indica leaves are hung at the front and back doors of the house, and on the fifth day in the lying-in room four Indian millet or *ivari* stalks, tied together at the top and with the lower ends stretched apart, are set above the grindstone on which a stone lamp is kept burning all night. A metal image of Satvai or Mother Sixth is set in a piece of dry cocoa-

kernel and laid on the grindstone with a small dough lamp before it. The husband worships the goddess and offers her cooked food. Some elderly woman draws an image of Satvai near each of the four feet of the mother's cot and sets a dough lamp in front of each figure. Near where the bathwater goes she draws on the ground a coal figure of Satvai, and sets the fifth dough lamp in front of the figure and four more charcoal figures, each with its dough lamp, on either side of the front and back doors. Married women are asked to dine and the laps of the midwife and of other married women who keep awake the whole night are filled with grain. On the next day the stone lamp is cleared and fresh oil and wicks are put in it and lighted. Curds and cooked rice are offered to the lamp, and on the morning of the seventh day the whole is removed. On the eighth day the cot is washed and worshipped and molasses are laid before it. Then bed clothes are spread on the cot and the mother and child are laid on it. Govardkans gird their boys with the sacred thread before they are twelve years of age. They set eight instead of six earthen jars at each of the four corners of the altar, and when the thread-girding verse is over throw over the boy's head grains of Indian millet or *jvari* instead of rice. They raise a second altar about a span wide over the main altar and feast a Brahman with the rice cooked on the sacrificial fire. They marry their girls before they are twelve and their boys before they are thirty. Unlike Deshasths the first ceremony in their marriages is the *supari* karayachi or betelnut-giving. The boy's father goes to the girl's house with relations friends and music, bearing a tray with a bodice, some wheat, a cocoanut, and betelnut and leaves. At the girl's the boy's father is met by a party of her relations and friends. The boy's priest asks the girl's priest to bring the girl and she comes and sits near the boy's priest. The boy's father marks her brow with redpowder, and a woman of her family hands her the bodice and fills her lap with the wheat and cocoanut and betelnut which the boy's father has brought. The girl and her female relations go inside of the house and the dates for the marriage are settled. The boy's father hands the priest packets of betel, gives money to beggars, and retires. Then along with the dishes of cooked food or rukhvat the girl's father goes and washes the boy's feet, marks his brow with redpowder, and presents him with a turban. They hold their marriages in the majghar or women's hall, and when the marriage verses are ended they throw grains of reddened millet over the boy and girl. After the ceremony is over a lighted lamp is set in a plate, and each guest waves a. copper pice (1/4 anna) over the boy's and girl's heads and throws it into the plate At the maidengiving or kanyadan, instead of pouring water over the girl's hands, the girl's father pours water over the boy's mother's hands repeating the words: 'Up to this time she was mine, now she is yours.' At the

clothes-giving or sadi a bodice cloth is spread in a bamboo basket and over the cloth eleven lamps are set instead of either sixteen or eleven. The boy and girl are seated on the shoulders either of their maternal uncles or of house-servants, and their bearers dance vigorously to the sound of music. When a Govardhan girl comes of age her mother goes to the boy's house with a plate of sugar and betel and tells them that her daughter is blessed with a son, and hands round the sugar and the betel to the boy's family. When a Govardhan is on the point of death five Brahmans are each given a pound of rice and a half-anna ($\frac{3}{4}d$.). The warm water that is poured over the body is heated in a brass instead of in an earthen pot, and the body is laid on the bier wrapped in the wet waistcloth instead of in a new dry cloth. They shave the chief mourner's head and mustache at the burning ground near the corpse's feet, and pay the barber 3d. (2 as.). The body and the bier are dipped in water before they are laid on the pile, and when the body is nearly consumed they retire. The other details are the same as those observed by Deshasths. They have a caste council and settle their social disputes at meetings of the castemen. They send their boys to school and are a steady class.

GUJARATIS.

Gujara't Brahmans, numbering 282, are found in the city of Poona and in small numbers over the whole district. They seem to have come to the district within the last hundred years. The names in common use among men are, Balabhai, Balkrishna, Chimanlal, Chhaganlal, and Nanabhai; and among women, Amba, Bhagirathi, Lakshmi, and Sarasvati. Their chief divisions are Audich, Disaval, Khedaval, Modh, Nagar, Shrigod, and Shrimali. They speak Gujarati at home and Marathi abroad. Many of them live in houses of the better class, one or two storeys high, with brick walls and tiled roofs. They own cattle and employ house servants. Their staple food is rice, pulse, vegetables, wheat cakes, and clarified butter. They are strict vegetarians, and some of them take opium, drink hemp-flower or bhang, and smoke tobacco. Though the practice is usual in Gujarat, they do not eat food cooked by a Deccan Brahman. The men wear a waistcloth, shirt, coat, turban, shouldercloth or *uparna*, and shoes. The women plait their hair into braids and wear false hair but not flowers. They wear a petticoat, the short-sleeved open-backed bodice or kancholi, and the robe or sari falling from the hips without passing the skirt back between the feet. As a class they are clean, honest, hardworking, and thrifty, though hospitable and fond of show. They are bankers, moneylenders, cloth merchants, pearl merchants, clerks, and priests and cooks of Gujarat Vanis. Some are landowners who do not till the land themselves but

let it to tenants who pay them half the Produce. On the whole they are a well-to-do class and free from debt.

Gujarat Brahmans are Smarts. They worship Balaji, Ganpati, Mahadey, Maruti, and Tulja Bhavani, and show special reverence to Balaji and Shankar, They make pilgrimages to Benares, Pandharpur, Rameshvar, and Tuljapur. They observe all Deccan Brahman holidays. They have a strong belief in witchcraft, soothsaying, and the power of evil spirits. Their women and children suffer from spirit-seizures. If one of them is attacked charmed ashes or angara is brought from an exorcist's or devarishi's and rubbed on the brow of the sick, or vows are made to the family gods and fulfilled after the patient recovers. Early marriages and polygamy are allowed and widow marriage is forbidden. A short time before a Gujarat Brahman woman's delivery a Maratha midwife or a woman of her own caste is called in. She cuts the child's navel cord and putting it in a pitcher buries it near the *mori* or bath-water pit in the lying-in room. The infant is bathed and the mother rubbed with cloths. For three days the babe is fed on water mixed with molasses, and on the fourth its mother begins to suckle it. The mother is generally fed on harira, that is wheat flour boiled in clarified butter mixed with molasses or sugar. On the fifth, the mother worships in the name of Satti or the spirit of the sixth, a sword, an arrow, a blank paper, and a reed pen placed on a low stool in her own room, and offers thorn sira puris, that is wheat cakes stuffed with wheat flour boiled in clarified butter and mixed with sugar. A light is left burning during the whole night before them and the women of the house sing songs and watch till morning. Next day the satti, worship is again performed and at the end the articles on the stool are thrown into a river. Ceremonial impurity continues for ten days. On the eleventh the mother is bathed, the house is cowdunged, and her clothes are washed. At noon on the twelfth, friends and relations are feasted and at night female relations name and cradle the child. Young children are asked to attend the naming, and each is given a piece of cocoanut. The mother does not leave her house for about forty days after her delivery. At the end of the forty days, she is dressed in a new robe and bodice, puts on new glass bangles, and is presented to a small company of female friends and relations who have been asked for the purpose. The child's hair is first cut at any time between the fifth month and the end of the fifth year. A lock of hair is sometimes dedicated to the gods and kept till the marriage day, when the vow is fulfilled and the lock cut off. The child is seated on the lap of its maternal uncle or its father, and the hair is cut by the barber who is paid 6d. to 10s. (4 as.-Rs.5). The child is bathed, dressed in new

clothes, and carried to the temple of Balaji, where it is made to bow to the image.

Before a thread-girding the father of the boy asks an astrologer who fixes a lucky day. When everything is ready, the wall in front of the house is marked with seven lines of clarified butter and worshipped in the name of the *gotras* or family stocks. A leaf of the *palash* Butea frondosa tree, covered with betelnuts and wheat, is set before the seven family stocks and worshipped. The head of the boy is shaved and he is seated on a low stool. The Brahman priest kindles the sacred fire and the boy throws on the fire clarified butter, sacred fuel sticks or *samidha*, and boiled rice, and is given a cloth to wear. Members of both sexes come, give the boy alms which are a perquisite of the priest, and the friends and relations of the houseowner are feasted.

Boys are married between twelve and twenty-five, and girl between eight and fifteen. The offer comes from the father of the girl. If the boy's father approves, betelnuts and leaves are handed among friends and relations and the news of the betrothal is spread. This is called the asking or magani. The turmeric-rubbing lasts one to eleven days. The girl is bathed and seated on a low stool; five married women rub her body with turmeric paste and her feet with rice paste. One of the women carries her to the threshold, where they form a circle round her and sing songs. They do this every morning and evening, and retire after the usual betel-handing. The priest and some married women of the bride's family take the remains of the turmeric and rub it on the bridegroom singing songs. On the marriage day, in the centre of the booth, a square or chavdi is made by fixing four bamboos in the ground and drawing over the tops of the bamboos a white cloth and placing earthen pots round the square. Shortly before the marriage, the women or the bride's family go to the bridegroom's with a red pot full of water, and seating him on a low stool bathe him. The bride's father presents him with a shawl and a silk waistcloth and an upright line of sandal paste is drawn on his brow. Garlands are hung round his neck, nosegays are put in his hands, and a coronet of flowers is set on his head. He is made to take a rupee and a cocoanut, and is led in procession with country music to the bride's. On reaching the bride's her mother comes with a dish in which are a lamp and two balls of rice flour mixed with turmeric powder, and waves the dish round the bridegroom, who throws the rupee into it and retires. He is led into the booth and seated. The bride is dressed in a white robe and a backless bodice with short sleeves, her hands are adorned with new ivory bangles, and she is seated close to the boy's right. The priest repeats texts, the bridegroom holds the bride by her right hand and they are

man and wife. Threads known as marriage' bracelets or kankans are passed through holes made in *ghela* fruits and fastened round the right wrists of the boy and girl. Then the daughter-giving or kanyadan is performed by the bride's parents giving a money-present to the bridegroom, and the bridegroom fastens a lucky necklace or mangalsutra round the bride's neck, and her toes are adorned with silver jodvis or toe-rings. Then the boy and girl sit in the square or chavdi, and throw clarified butter into the sacred fire. They next walk round the sacred fire, the bride sometimes leading and at other times the bridegroom. Rice is boiled on the sacred fire and mixed with sugar and clarified butter. The bridegroom takes five handfuls of rice from the, bride and she takes five handfuls from him, and the mothers of both take five handfuls from both. Then the bride's mother serves the couple with sugar and clarified butter and both eat freely. After the meal is over, before washing his hands, the bridegroom catches his mother-in-law's skirt and she makes him a present. Friends of the bride and bridegroom give presents to both. The brows of the bride and of the bridegroom are marked with an upright line of sandal paste. They bow to the images of their gods in the house and play at odds and evens before the shrine. On the second or third day each unties the other's wedding bracelet or kankan, and the priest takes the bracelets away. The earthen pots that were arranged round the square or chavdi are distributed among the women of both families and their friends, and suits of clothes are presented to the bridegroom's party by the father of the bride. This is known as the robe-giving or sada. The couple are then taken to the bridegroom's on horseback or in a carriage. On reaching the house they both bow before the house gods and friends and relations are feasted.

No special ceremony is performed when a girl comes of age. When a girl is pregnant for the first time a sacred fire is kindled, and she is dressed in a new green robe, decked with ornaments, and taken in a palanquin to a temple, and her father feasts friends and relations on fried gram or *bundi* balls.

On signs of death, gifts are made to Brahman priests according to the man's means. When he has breathed his last the body is bathed, dressed in an old waistcloth, and laid on a place washed with cowdung and covered with *dharbha* or bent grass. All the caste-men are asked to attend the funeral. The chief mourner prepares three balls of wheat flour. The dead is laid on the bier and one of the three balls is laid beside him. The chief mourner, holding a firepot in his right hand, starts followed by the bearers. On the way the bearers stop and lay down the bier, leave a rice ball and one or two copper coins, and

change places. When they reach the burning ground a pile is made ready, and the body is laid on the pile with a rice ball at its side; the chief mourner's head and face are shaved except the top-knot and eyebrows and the pile is set on fire. When it is nearly consumed the chief mourner sets an earthen jar filled with water on his shoulder and walks round the pile. Another man follows and with a small stone makes a hole in the jar at each round, so that the water trickles out. At the end of the third round the chief mourner throws the jar over his shoulder and calls aloud beating his mouth with his hand. The rest of the party bathe and return to the house of mourning, where they sit for a moment, and then go to their homes. On the third day, the five cow-gifts, milk curds clarified butter dung and urine, are poured over the ashes of the dead, and they are gathered and thrown into water. The mourning family remains impure for ten days on each of which ceremonies are performed. On the eleventh day gifts are made to Brahmans, and on the twelfth or on any day up to the fifteenth, a caste feast of fried gram balls is made. Gujarat Brahmans form a distinct and united community. Social disputes are settled at meetings of castemen, minor offences being punished by fines of 2s, to £10 (Its. 1-100), the sum collected being spent in caste-feasts. They send their boys and girls to school and take to new pursuits. On the whole they are a rising class.

JAVALS.

Javals, who take their name from, the village of Javalkhor in Ratnagiri and who are also known as khots or village revenue farmers, are returned as numbering eleven and as found only in Poona city. They are said to be the descendants of a shipwrecked crew who landed at Javalkhor half-way between Harnai and Dabhol in Ratnagiri. Their name is said to come from the word jaul a storm. According to the common story the people of Burondi gave them leave to settle in Devakea, a hamlet near their village, and told them to supply flowers to Taleshvar, the village god. They afterwards became the medical attendants of the Phadke family, who, under the Peshwa, held that part of the Konkan and who succeeded in having the Javals' claim to be Brahmans acknowledged All are laymen or *grahasths* and they have no subdivisions. They look like Kunbis, are dark, less carefully clean than other Brahmans, and at home speak a rough Kunbi-Marathi. They use double n and l instead of single n and l, and have a curious way of pronouncing certain words. They eat fish but no other animal food and refrain from liquor. They dress like Deccan Brahmans and in family matters copy the Chitpavans. Other Brahmans neither eat nor marry with them. They are frugal, orderly, and hardworking, earning their

living as husbandmen and writers. None of them are *bhikshuk* or begging Brahmans. They worship the usual Brahmanic gods and their family goddess is Kalkadevi. They keep the usual fasts and feasts, and as none of them belong to the priestly class their household priests are Chitpavans. They say that their customs are the same as those of Chitpavans. Social disputes are settled at meetings of castemen. They do not send their boys to school, are poor, and show no signs of rising.

KANOJS.

Kanoj Brahmans, who take their name from Kanoj in the North. West Provinces, number 700 and are found in the city of Poona and all over the district. They are said to have come into the district within the last 150 years. They claim to belong to the Angiras, Barhaspaty, Bharadvaj, Kashyap, Kattyayan, and Vashisth *gotras* or families. Persons of the same family stock and with the same pravar or founder cannot intermarry. The names in common use among men are Balprasad, Bhavadiga, Devidin, Deviprasad, Gopinath, Jagannath, Ramnath, Shankardin, Shankarprasad and Shivaprasad; and among women, Jamana, Janki, Lachhimi, and Sundar. Their common surnames are Agnihotri, Bachape, Bal, Chanbe, Chhaga, Dikshit, Hari, Kibe, Mishra, Pathak, Shakta, Tivari, Tribedi, and Vaikar. Persons having the same surnames cannot intermarry. They speak the Brij language at home and Hindustani out of doors. They have two main divisions, Kans that is Kanoja Brahmans, and Kubjas that is Sarvariya Brahmans. The two divisions practically form one class as they formerly intermarried freely and still intermarry to some extent. They profess to look with suspicion on such of their castemen as come from Upper India, as they say many of them were forced to adopt Islam and are reverts to Hinduism. They are stronger, stouter, and fairer than Deccan Brahmans. Their face-hair is long, thick, and black. Soldiers, besides the top-knot, wear a tuft of hair over each ear, and grow full beards. Others shave the head except the top-knot and shave the chin. They live in houses of the better class, one or two storeys high, with walls of brick or stone and tiled roofs. They are moderate eaters with a fondness for both sweet and sour dishes. They never boil their vegetables with salt, but leave the eater to add salt and chopped chillies when the dish is served. Their staple food includes rice, wheat cakes, vegetables, clarified butter, and sugar or molasses. A family of five spends £1 4s. to £1 16s. (Rs. 12 -18) a month on food, and in feeding a hundred guests spend £2 10s. to £3 (Rs. 25 -30). They usually bathe and worship their family gods before they eat. The use of flesh and liquor is forbidden. The men usually wear a waistcloth in Deccan Brahman fashion, a coat, shouldercloth, turban, and shoes;

and the women wear a petticoat and robe and a backless bodice. They plait their hair in braids which they draw back and tie together at the top of the neck. They are fond of wearing flowers in their hair especially on holidays. Both men and women keep rich clothes in store for holiday use. Their ornaments are the same as those worn by Maratha Brahmans. Kanojs as a rule are clean, hardworking, and sober, easily provoked, hospitable, and frugal though vain and fond of show. At present their chief calling is *sipahigiri* or service as soldiers and messengers. Some have taken to husbandry, to moneychanging, and to the priesthood, acting as house-priests chiefly among the Pardeshi or Upper Indian section of the people. The priest trains his son from his boyhood, and the son begins to practise his calling after he is fifteen. As priests they are well employed and well paid earning about £2 (Rs. 20) a month. Their women do nothing but house work. Kanoj Brahmans rank with Deccan Brahmans; each professes to look down on the other. They are a religious people and their family gods are Bitarajdevi of Upper India, Ganpati, Mata of Calcutta, and Shankar. Their priests belong to their own caste. They make pilgrimages to Allahabad, Benares, and Jagannath. Their chief holidays are Basant Panchami or Simaga in March; Dasara in September, and Divali in October; they fast on Ekadashis or lunar elevenths, Shivratra in January, Rama-navami in April, and Gokul-ashtami in August. They believe that the spirit of a man who dies with some unfulfilled wish wanders after death as a ghost and troubles the living. They believe in witchcraft and soothsaying, and their women and children suffer from the attacks of spirits. Spirit-attacks are cured either by making vows to the family god for the recovery of the possessed, or by the help of an exorcist or devrishi. When a woman is in labour a midwife is called in. She outs the navel-cord and lays the mother and child on a cot. The child is made to suck honey for the first three days, and its mother for twelve days is fed on boiled wheat flour mixed with butter and molasses. From the fourth day she begins to suckle the child. On the sixth day the women of the house wash their hands in a mixture of water, turmeric, and redpowder, and press the palms five times against the walls of the lying-in room. In front of the palm marks a golden image of Satvai is set on a stone slab, with a pomegranate, a sheet of blank paper, a reed pen, a piece of three edged prickly-pear or *nivadung*, and some grains of river sand, and is worshipped by the women of the house who lay before them cakes, curds, and flowers. They wave lamps round the image and remain awake during the whole night singing songs. The uncleanness caused by birth lasts ten days. On the eleventh the house is cowdunged and the mother's clothes are washed. On the twelfth the mother worships the sun and shows it to the child. Some men of the caste are asked to dine and the female

relations and friends of the house are called at night to name and cradle the child. Packets of sugar betel leaves and nuts, are handed round and the naming is over. They spend on a birth 16s. to £1 (Rs.8-10). Between the beginning of a child's sixth month and the end of its second year its hair is cut. The child is seated on its mother's lap and its hair is cut by the barber who is paid 3d. (2 as.). The child is bathed and each of its mother's female relations and friends waves a copper coin round its head and drops the coin into a dish and the sum so collected goes to the barber. A hair-cutting costs 8s. to 10s. (Rs.4-5). When a Kanoj Brahman boy is to be girt with the sacred thread, the father of the boy asks an astrologer to choose a lucky day and pays him 3d. (2 as.). A porch is built in front of the house and friends and relations are asked to come. Five married women are called, and, at a lucky hour, are made to grind wheat. The houseowner gives them turmeric and redpowder and fills their laps with rice. When these preparations have been made they bring from the potter's an earthen hearth or chula and place a jar or dera on the hearth, plaster the jar with cowdung, and stick wheat grains round it. The priest repeats verses and drops rice grains over the jar; the women sing songs and cover the jar with an earthen lid. A second jar is brought, filled with water and plastered with cowdung, wheat grains are stuck round it, and it is set near the lucky pole or muhurta medh in the porch on a small heap of earth strewed with wheat. In a day or two the wheat sprouts and these sprouts are said to be the quardian or devak. The boy is seated on a low stool near the lucky pole set on an altar or bahule which is surrounded by lines of quartz powder or rangoli. The women of the house sing songs and rub the boy with turmeric paste; each waves a copper coin round him and drops it into a dish where it is kept for the barber. The turmeric-rubbing lasts two or three days, the boy being rubbed each day morning and evening. On the threadgirding day the boy's head is shaved. He is bathed and for the last time eats from his mother's plate sitting on her lap. His head is shaved after the dinner is over and he is again bathed. The boy is stripped naked, and he and his father are made to stand face to face on low stools placed in a quartz square with a piece of cloth drawn between them. The priest repeats texts, the quests throw red-tinted rice on the boy, the curtain is drawn aside, and the priest hands the boy a sacred thread or janava and a loincloth. The father sets the boy on his lap and whispers in his right ear the sacred Gayatri verse. The priest kindles a sacred fire and pours clarified butter over it. The boy is now a Brahmachari or begging-Brahman and the guests make him presents, a coat, a cap, a waistcloth, or a pair of wooden sandals. The Brahmans are feasted and the women sing songs. Next day the priest throws rice on the quardian earthen pot. Friends and relations are fed on wheatcakes or *puris*, and boiled rice milk and sugar called *khir*, and to each a money present is made.

Boys are married between fifteen and thirty, and girls between five and fifteen. The men of the caste meet and propose an alliance between two families, who, in order not to displease their castefellows, agree. Though they agree they are not bound to go on with the wedding at once. During the year before the wedding, the girl's father visits the boy with music and kinspeople, worships him with sandal and flowers, and presents him with a turban whose end is marked with circles of turmeric and redpowder. Betelnut and leaves are handed, and the girl's father places a cocoanut in the boy's hands and withdraws. On a lucky day the boy's father presents the girl with silver anklets, and instals a quardian or devak as at a thread-girding. Two or three days after the guardians have been set in her house, the women of her family rub the girl with turmeric powder, and some married women with music take what is left to the boy's and are given a right-hand gold bracelet called patali and a bodice. The bride is dressed in the clothes and her lap is filled with rice and a cocoanut. Next day the boy is dressed in a fine suit of clothes and with a peacock-feather coronet on his brow is seated on horseback and is led with music in procession to the girl's house. On reaching the marriage porch betel is handed among the quests, and the bridegroom steps into the booth, and is carried to a seat round which lines of quartz have been traced. The girl is led out of the house and is made to stand in front of the bridegroom on a low stool, behind a curtain or antarpat. The priest repeats marriage texts and throws rice grains over the couple. The curtain is drawn on one side and the couple are man and wife. The priest kindles the sacred fire, and the girl and boy throw into the fire clarified butter and parched rice. They walk six times round the fire, the bride taking the lead and the bridegroom following. At the end of the sixth turn the bride goes into the house and with much weeping and lamenting takes leave of her home. When she again comes out her father mentions his own and the bridegroom's family stock or gotra and birth-place, and, after asking leave of the guests, the bridegroom takes the seventh turn round the fire, followed by the bride, and the marriage is complete. A silken thread is passed through an iron ring and fastened to the boy's right hand, and another to the bride's left hand, and the skirts of their garments are knotted together. They go and bow before the girl's family gods and the ceremonies end with a feast in which the bride and bridegroom join. The bridegroom spends a day or two at the bride's. When these days are over the bride and bridegroom throw yellow and red rice over the marriage guardian or devak and are sent on horseback to the

bridegroom's. On reaching the house a wood or iron *sher* measure filled with rice is set on the threshold and the bride overturns it with her foot as she enters the house. They enter the house and bow before the boy's family gods. The guests are feasted and the wedding festivities are over.

When a girl comes of age she is unclean for four days. On the sixth day she and her husband are bathed together and the priest kindles a sacred fire and pours clarified butter over it. The girl's lap is filled with a cocoanut, dates, almonds, and sweetmeats; bent grass is pounded and her husband pours some drops of the juice down her right nostril. Friends and relations are feasted on wheat cakes and curds, and, at any time after this, the girl may go and live with her husband as his wife. On some lucky day during the seventh month of her first pregnancy the woman is dressed in a new robe and bodice and her female relations meet at her house and sing songs.

When the sick is beyond hope of recovery, he is made to give grain and $1\frac{1}{2}d$. to 3d. (1-2 as.) in cash to the Brahman family priest and is laid on a white blanket. When he has breathed his last the body is bathed in cold water and laid on a bier. When the body is fastened on the bier the chief mourner starts carrying a firepot by a string, and the bearers follow. On their way they set down the bier, change places, and pick up a stone which is called ashma or spirit. On reaching the burning ground the chief mourner has his head and face shaved except the top-knot and eyebrows, and the dead is laid on a pile and burned. When the body is nearly consumed the chief mourner lifts on his shoulders an earthen pot full of water. When he stands a man beside him makes a hole in the pot with the life-stone which was picked up at the place where the body was rested. The chief mourner makes three rounds and at each round a fresh hole is made. At the end of the third round he throws the jar over his head, beats his mouth with his hand, and calls aloud. The funeral party bathe, go to the house of the deceased where cow's urine is poured over their hands, and return to their homes. On the third day they bathe, gather the ashes of the dead, and throw them into water. Three dough balls or pinds are made, worshipped, and wheat cakes and curds are laid before them. On the tenth, ten dough balls are made at the burning ground, nine are thrown into the river and the tenth is offered to cows. The chief mourner bathes and returns home. The ceremonial uncleanness caused by a death lasts ten days. On the eleventh the mourners put on new sacred threads and a memorial or *shradha*, is performed in the name of the dead. On the twelfth sapindis or balls of rice are offered to the dead, and, on the thirteenth, friends and relations are asked to

dine at the house of mourning, when they present the chief mourner with a turban; Every year in the month of *Shravan* or August a memorial or *shraddha* is performed on the day of the month corresponding to the deceased's death-day, and, on All Soul's Day or *Mahalaya Paksha* in the dark half of *Bhadrapad* or September, an offering is made in his name. The Kanoj Brahmans have a council and settle social disputes at caste-meetings. They send their boys to school, readily take to new pursuits, and are likely to prosper.

KARHADAS.

Karha'da's, or people of Karhad in Satara, are returned as numbering 1576 and as found all over the district. They probably represent one of the early Brahman settlers who made his abode at the sacred meeting of the Krishna and Koyna rivers, about fifteen miles south of Satara. According to the Sahvadri Khand the Karhadas are descended from asses' or camels' bones which a magician formed into a man and endowed with life. This story is apparently a play on the words kar an ass and had a bone. They say that their ancestors lived in the Konkan and came to Poona to earn a living about a hundred and fifty years ago. They have no subdivisions and marry among themselves, and occasionally with Deshasths and Konkanasths. Their family stocks are the same as those of the Chitpavans; the chief of them are Atri, Jamadagni, Kashyapa, Kutsa, and Naidhava. Families belonging to the same stock do not intermarry. Their surnames are Dhavle, Gune, Gurjar, Kakirde, Karmarkar, Kibe, Shahane, and Shevle; sameness of surname is no bar to marriage. The names in common use among men are, Baba, Dajiba, Hari, Nilkanth, and Tatya; and among women, Anandi, Gopika, Janki, and Saguna. They look like Chitpavans but are somewhat darker, and none of them have blue or gray eyes. They speak like Chitpavans. Their houses are of the better sort one or two storeys high with brick walls and tiled roofs. The furniture includes cots, bedding, chairs, tables, benches, boxes, carpets, picture-frames, glass hanging lamps, and metal drinking and cooking vessels. They keep servants, cattle, and parrots. They are vegetarians, their staple food being rice, split pulse, and vegetables. A family of five spends on food £1 10s. to £1 18s. (Rs.15-19) a month; and their feasts of sweet cakes and gram balls cost $4\frac{1}{2}d$. to $7\frac{1}{2}d$. (3-5 as.) a head. They dress like Chitpavans, and their women wear false hair and deck their heads with flowers. They are clean, neat, hospitable, and orderly. They are writers in Government offices, husbandmen, moneychangers, astrologers, and beggars, earning £1 to £5 (Rs. 10-50) a month. Their houses cost £50 to £200 (Rs. 500-2000) to build, and 2s. to 10s. (Rs. 1-5) a month to rent. A servant's wages are 4s. to 6s. (Rs.2-3) a

month with food; and the feed of a cow or a she buffaloe costs 16s, to 18s. (Rs. 8-9) a month. Their clothes cost £2 10s. to £8 (Rs. 25-30) a year, and their furniture is worth £10 to £1000 (Rs. 100-10,000). A birth costs 16s. to £1 (Rs. 8-10); a hair-clipping 14s. to 18s. (Rs. 7-9); a thread ceremony £5 to £10 (Rs. 50-100); a boy's marriage £10 to £50 (Rs. 100-500); a girl's marriage £10 to £30 (Rs. 100-300); a girl's coming of age £5 (Rs. 50); a pregnancy feast £2 10s. (Rs. 25); and death £7 10s. (Rs. 75). They, are Rigvedis and their family goddesses are Vijayadurga and Aryadurga in Ratnagiri and Mahalakshmi in Kolhapur. Their family priests belong to their own caste. They keep the regular Brahmanic fasts and feasts and their chief Teacher or *quru* is the Shankaracharya of Shringeri in Maisur. They hold the nine nights or *navaratra* in September-October very sacred. Their customs are the same as those of Chitpavans. Under the early Peshwas Karhada Brahman s are said to have offered human sacrifices to their house goddess Mahalakskmi. The victim was generally a stranger, but the most pleasing victim was said to be a son-in-law. The death was caused by cutting the victim's throat or by poisoning him. [Sir John Malcolm, 1799. Transactions Literary Society Bombay (New Edition), III. 93-95: compare, under the names Carwarrees, the account by Sir James Mackintosh (1811) Life, II. 83.] The practice was severely punished by the third Peshwa Balaji Bajirao (1740-1761). No cases are known to have occurred for many years. Karhadas with Deshasths, Konkanasths, and Devrukhes, form the local Brahman community and settle social disputes at meetings of the men of all four classes. They send their boys to school and are well-to-do.

KASTHS.

Ka'sth Brahmans, numbering 178, are found in Bhimthadi, Junnar, Maval, and Poona. They claim descent from Kattyayani, the eldest among the fifteen sons of the sage Yadnavalkya by his wife Kattya, and call themselves Kattyayani Sakhi Brahmans, that is Brahmans of the Kattyayan branch. They say that they formerly dwelt in Nasik and Khandesh and came to Poona within the last hundred and fifty years. They have no subdivisions. The commonest names among men are, Appa, Bapu, Gambaji, Govind, and Yadneshvar; and among women, Chandrabhaga, Ganga, Janki, and Yamuna. Their surnames are Nagnath, Pandit, Pathak, and Vaidya; persons having the same surnames cannot intermarry. Their family stocks are Bharadvaj with three divisions, Angiras, Barhaspatya, and Bharadvaj; Kaushik with three divisions, Aghamarshan, Kaushik, and Vishvamitra; Kashyapa with three divisions, Kattyayan, Kilak, and Vishvamitra; Vashishth with

three divisions, Parashar, Shakti, and Vashishth; and Vatsa with five divisions, Apnavan, Bhargava, Chavana, Jamadagni, and Vatsa. Persons having the same family stock and the same founder or pravar cannot intermarry. Their home tongue is Marathi. Kasths are like Deshasth Brahmans in appearance. As rule they are dark, strong, and well-made. Except the top-knot, the men shave the head-hair which is long and black and the face-hair except the mustache and eyebrows. Their home tongue is a corrupt Marathi and they live in clean and neat middle-class houses, costing to build £50 to £150 (Rs. 500-1500), two storeys high, with walls of stone or brick and tiled roof. The furniture, which is worth £ 15 to £100 (Rs. 150-1000), includes cots, boxes, tables, chairs, glass lamps, mirrors, mixed wool and cotton rugs, carpets, blankets, beds, and shawls. They employ house servants and own cattle. They are moderate eaters and good cooks, and are fond of sweet dishes. Their staple food is rice, pulse, millet bread, and wheycurry or amti. A family of five spends £1 4s. to £1 10s. (Rs. 12-15) a month on food. They bathe regularly, say twilight prayers or sandya, and lay before their family gods offerings of flowers, sandal paste, frankincense, and food. They are in theory strict vegetarians and the use of animal food and liquor is forbidden on pain of loss of caste. They smoke hemp and tobacco. They dress like Deshasth Brahmans and have a store of clothes for holiday wear. They are clean, neat, hardworking, and mild, often showy and hospitable. Their hereditary calling is moneychanging and priestship, by which they earn £2 to £5 (Rs. 20 - 50) a month. Some are shopkeepers and some are in Government service. Women mind the house and never help the men in their work. As a class they are well-to-do. They rank themselves with Maratha Brahmans, but Deshasths look down on Kasths and never eat with them. Their women mind the house and their children go to school. The men are always busy and do not close their shops on any day of the year.

Kasths are a religious people. Their family gods are Bhavani of Tulajpur, Dattatraya, Khandoba of Ambadgam near Paithan, Lakshmi, Magapur, Saptashringi, and Vyankatesh. Their family priest belongs to their own caste and officiates at the sixteen sacraments or sanskars. They claim to belong to the Shakt sect, and treat their family gods with special reverence. Some worship Mahadev and make pilgrimages to Alandi, Benares, Nasik, Pandharpur, and Rameshvar. They keep the same' holidays as Deshasth Brahmans, and fast on Ekadashis or lunar elevenths, Shivaratra in February-March, Ram-navami in April, and Janmashtami in August. They believe in witchcraft, soothsaying, and in the power of spirits. They perform the sixteen sacraments and their customs do not differ from those of Deshasths. They form a separate

community but have little social organization and seldom meet to settle disputes. In theory a man who eats flesh should humble himself before their high priest Shankaracharya and take the five cow-gifts; in practise breaches of caste rules are common and penance is rare. They send their boys to school and college till they are twenty-five, and their girls to school till they are twelve. They are a pushing class well-to-do and ready to take to new pursuits.

MARWARIS.

Ma'rwa'r Brahmans are returned as numbering 200 and as found over the whole district except in Junnar. They say they are called Chhanyati Brahmans, because they are sprung from six Rishis or seers, Dadhichya, Gautam, Khande, Parashar, and Shringi; the name of the sixth they do not know. Those of them who are sprung from Dadhichya Rishi are called Dadhyavas; those from Gautam Gujar-Gauds; those from Khande Khandelvals; those from Parasar Pariks; those from Shringi Shikhvals: and those from the nameless sixth Sarasvats. All eat together, and, though they do not intermarry in appearance, speech, religion, and customs they form one class. The different divisions seem to have come into the district, if not at the same time, at least from the same parts of India and under similar circumstances, and they do not differ in calling or in condition. They say that they came into the district from Jodhpur in Marwar during the Peshwas' supremacy. Their Ved is the Yajurved, their shakha or branch the Madhyanjan, then family stocks Shyandil and Vachhas, and their surnames Joshi, Soti, Twadi, and Upadhe. Families of the same surname and stock cannot intermarry. The men wear the mustache, whiskers, and beard, and besides the ordinary top-knot a tuft of hair over each ear. Their home tongue is Marwari and they live in hired houses paying 1s. to 4s. (8 as. - Rs. 15) rent a month. They generally own vessels, bedding, carpets, and boxes. They are vegetarians and of vegetables eschew onions and garlic. Their staple food is wheat, split pulse, butter, and sometimes vegetables. Their feasts cost 6d. to 1s. (4-8 as.) a head. They smoke tobacco, hemp, and opium, and drink a preparation of hemp or sabji, but neither country nor foreign liquor The men wear the small tightly rolled two-coloured Marwari turban, a long coat, a waistcloth and shoes, and the women a petticoat or ghagara, and an open-backed bodice or kacholi. They are thrifty and orderly, but dirty and grasping. They deal in cloth and grain, act as cooks and priests, and live on the alms of Marwar Vanis. They worship the usual Brahmanic gods and goddesses, but their favourite god is Balaji. They say that their fasts and feasts are the same as those of Maratha Brahmans. Their priests are men of their own class. They

make pilgrimages to Benares, Dwarka, and Jagannath, and believe in sorcery, witchcraft, soothsaying, omens, lucky and unlucky days, and oracles. They keep the fifth day after the birth of a child and generally go to their native country for thread girdings and marriages. They have no headman and settle social disputes at meetings of the castemen. They send their boys to school and are a steady class.

SHENVIS.

Shenvis, a name of doubtful meaning, who also call themselves Sarasvats and Gaud Brahmans, are returned as numbering 445 and as found all over the district, except in Indapur. [The origin of the name Shenvi is disputed. According to one account it is shahanav or ninetysix from the number of the families of the original settlers. According to a second account it is send an army, because many Shenvis were warriors. A third derives it from shahanbhog the Kanarese term for village accountant. Of the three derivations the last seems to find most favour with the well-informed.] Except a few who are Shenvis proper they belong to the subdivision which takes its name from the village of Bhalaval in the Rajapur sub-division of Ratnagiri. Of the other subdivisions of the caste the Pednekars are called after the Goa village of Pedne; the Bardeskars after the Goa district of Bardesh; the Sashtikars after the Goa district of Sashti; and the Kudaldeshkars from Kudal in Savantvadi. These subdivisions sometimes eat together but do not intermarry. This is due to social exclusiveness rather than to any difference of origin or custom. The late Dr. Bhau Daji, who was himself a Shenvi, gave a dinner in Bombay to which men of all the subdivisions came, Since his death the old distinction has revived.] They claim to be a branch of the Sarasvat Panch Gaud Brahmans and are supposed to have come from Hindustan or Bengal. Their original Konkan settlement was Gomanchal the modern Goa. They have fourteen *gotras* or stocks, the names of some of which are Dhananjaya, Vasishth, Kaundinya, Bharadvaj, Kashyap, and Vatsa, Families bearing the same stock-name cannot intermarry. Their commonest surnames are, Aras, Banavalikar, Gharmode, Haldavnekar, Kamat, Kanvinde, Kavalkar, Kinre, Rapkar, Sakulkar, Shevade, Tendolkar, and Vaghle. Unless, which is seldom the case, they are of the same stock-name families bearing the same surname may intermarry. The names in common use among men are, Bhavani, Narayan, Pandurang, Rambhau, Shantaram, and Vishvanath; and among women, Rama, Sarasvati, and Varanasi. The men are generally well made, middle-sized, and dark; and the women rather taller and fairer with regular features. They speak Marathi like other high caste Hindus, but at home with many South Konkan peculiarities. They live

in houses of the better sort, one or two storeys high with walls of brick and tiled roofs. Their house goods include boxes, cots, tables, chairs, benches, carpets, bedding, picture frames, glass lamps, metal pots and pans, and earthen jars for storing grain. They keep servants and have cattle and are fond of pungent dishes. They eat fish and mutton, but their staple food is rice, pulse, and vegetables. A family of five spends on food £1 to £5 (Rs. 10 - 50) a month. Caste-dinners are given at thread-girdings, marriages, and deaths, and the guests are asked the day before the dinner by one or more members of the host's household. Invitations are confined to the host's caste. Guests belonging to other castes either dine after the host's castemen have dined or take the food home. These dinners are generally attended either by one member of each family asked or by all the members, the number depending on the form, of invitation. The host engages Brahman cooks who with the help of the host's family and relations both cook and serve the food. As a rule these caste-dinners are held during the day between ten and two. The men and women dine in separate rooms, the children and the grown up daughters with their mothers. Food is served either on metal or on leaf plates, and the guests wear silk waistcloths and robes. When dinner is over they wash their hands and mouths, and, putting on their upper garments, are served with betel and return to their homes. A caste-dinner costs 3d. to 1s. (3-8 as.) a guest. A Shenvi man's ordinary indoor dress is a waistcloth; out of doors it is a waistcloth, a coat, a waistcoat, a loosely rolled headscarf or a Maratha Brahman turban, and shoes. The women wear the full Maratha robe and a short-sleeved bodice and on festive occasions throw a scarf over the head. The ceremonial dress of both men and women is the same as their ordinary dress only it is more costly. The Shenvis are hospitable and intelligent, but untidy and fond of show. They are husbandmen, religious beggars, moneychangers, and Government servants. To build a house costs £50 to £150 (Rs. 500-1500) and to hire a house 4s. to £1 (Rs. 2-10) a month, and their household goods are worth £10 to £200 (Rs. 100-2000), Servants' monthly wages cost 4s. to 8s. (Rs. 2-4) with food; the keep of a cow or she-buffaloe 4s. to 10s. (Rs. 2-5), and of a horse £1 to £1 10s. (Rs. 10-15). The yearly cost of clothes is £3 to £6 (Rs. 30-60); a birth costs 4s. to 10s. (Rs. 2 - 5); a hair-clipping 6s. to 10s. (Rs. 3-5); a thread-girding £2 10s. to £10 (Rs. 25-100); a boy's marriage £10 to £100 (Rs. 100-1000), and a girl's marriage £20 to £30 (Rs. 200-300); a girl's coming of age £2 to £5 (Rs. 20-50); a pregnancy feast about £2 10s. (Rs. 25); and a death £1 to £4 (Rs. 10-40). In religion Shenvis proper, Bhalavalkars, Kudaldeshkars, and Pednekars are Smarts that is their creed is that God and the soul are one and that the worship of all the gods, is equally effective. They generally wear the Smart browmark, a crescent of white sandal dust. Among the other subdivisions the Sashtikars and Bardeshkars are Bhagyats whose creed is that the soul and the universe are distinct and that the proper object of worship is Vishnu. They wear one black line between two upright white-clay brow lines. The family gods of the Shenvis proper are Mangesh, Shantadurga, and Mahalakshmi, whose shrines are within Goa limits; the shrine of Mangesh, who is a local Mahadev, is in a village of the same name, and the shrine of Shantadurga his spouse is in the village of Kavle. Bardeshkars, Kudaldeshkars, and Pednekars worship the gods of the village in which they happen to live. The family gods of the Sashtikars are Kamakshi, Malnath, Ramnath, Ravalnath, and Navadurga. Their priests are the Karhada, Deshasth, and Konkanasth Brahmans who officiate at their houses, and in some cases men of their own class. On the birth of the first male child sugar is handed among friends and relations. Either on the fifth or the sixth day after a birth the goddess Satvai is worshipped and a dinner is given to near relations. Among the neighbours young mothers and pregnant women leave their houses and for eight days live elsewhere. On the twelfth day the child is named, the name being chosen by an elderly woman of the father's house, and on the same day a cocoanut and grains of rice are laid in the mother's lap. On the thirteenth day the young mother touches a well, friends and relations present the child with clothes, and the mother becomes pure. Boys are girt with the sacred thread at the age of eight or at ten if the father is poor. An earthen altar is built in a booth or porch in front of the house. On the day before the ceremony a party of the host's kinsmen with the family priest and musicians starts to call friends, relations, and castefellows. On reaching a house the family priest asks for the head of the house and lays in his hand a few red-coloured rice grains and asks him to come the next day to a thread-girding at the host's house. Relations and friends who live at a distance are invited by cards which are sprinkled with wet saffron. Next morning the boy and his mother bathe and for the last time dine from the same plate. Then the priests and guests arrive and the religious ceremony is performed, the father teaching the boy the sacred Gayatri verse. When this is over, if the host is well-to-do, dancing-girls dance and the guests are dismissed with rosewater and betel. An evening or two after comes the begging or bhikshaval when the mother of the boy with a few other women of the family goes to some temple close by. She is met by women relations and friends and is escorted with music back to her house. On arriving each of the women quests is offered a cocoanut with betelnut and leaves. On the evening of the eighth day the boy is dressed in a turban, coat, and silk waistcloth, and accompanied by kinspeople, friends, and musicians is taken on horseback to a temple close by his

house. The guests sit with the boy in their midst, and his maternal uncle comes to him and advises him to give up the idea of leading the life of a recluse and offers to give him his daughter in marriage. After some feigned hesitation the boy agrees, and be and his friends return to his house. When his daughter is about eight years old a Shenvi makes inquiries among his castefellows to find her a husband. When a suitable match is found the boy's family priest generally compares his horoscope with the girl's, and, if the horoscopes agree, the girl's father, except when the boy is a widower, pays the boy's father a sum of money. Both families lay in stores of grain and pulse and buy ornaments. A marriage porch is built at both houses, and dinners are given to kinspeople and castepeople, invitations being issued with the same formalities as for a thread-girding. On the marriage morning the girl's father goes to the boy's house, or to his lodgings if he has come from a distance, worships him, and presents him with a turban and waistcloth, and his sister with a robe and bodice. This ceremony is known as the boundary-worship or simant-pujan, a name which shows that the ceremony used to be performed when the boy crossed the border of the girl's village. Immediately after the girl's father leaves, the boy's father, with relations friends and musicians, goes to the girl's house and formally asks her father to give his daughter in marriage to his son. This ceremony is called *vagnischaya* or the troth-plighting. The fathers, according to their means, exchange turbans or cocoanuts. The boy's father presents the girl with ornaments, a robe, and a bodice, and her sister with a robe and bodice or a bodice only according to his means. The boy's mother lays rice and cocoanuts in the girl's lap, betel is handed, and the boy's friends return home. In the afternoon of the marriage day a party of women starts for the girl's house taking a robe, turmeric mixed with cocoanut oil, ornaments, and sweetmeats. This is called the robe and oil or telsada procession. When they reach the girl's house the women of her family are called, and in their presence the girl is dressed in the robe, decked with the ornaments, and rice and a cocoanut are laid in her lap as many times over as there are women present, and sweetmeats are handed. After reaching home they start a second time with a present of flowers and a robe. This, which is known as the flower and robe or phulsada ceremony, is the same as the last except that flowers take the place of the turmeric and oil. After this a procession of men and women accompanied by musicians starts for the girl's house to present refreshments or *rukhvat*. On reaching the house sweetmeats are given to the boy and his companions and the party withdraws. When the rukhvat or boy's feast is over, he is dressed in rich clothes, a marriage ornament is bound round his turban, and, after bowing before his house gods and his elders, he is taken to the bride's either in a

palanguin or on horseback. In front of him march musicians and on either side of him walks a woman, one holding a lighted lamp and the other a copper pot filled with water on the top of which float mango leaves and a cocoanut. Every now and then the procession stops and fireworks are let off. When the procession reaches the girl's house, her father and mother come out dressed in silk, receive the boy, and lead him into the house. His feet are washed by his father-in-law and a married woman waves a lighted lamp before him. Then the girl's father gives him a cocoanut, and leads him to a seat in the marriage hall where the men guests are met. The girl who has been offering prayers to the goddess Gauri, is dressed in a robe and bodice of coarse yellow cloth called ashtaputri. After certain religious ceremonies are performed by the girl's father and the boy, the girl is brought her maternal uncle and placed by the side of her parents, a sheet or antarpat is held between the boy and the girl, the priest repeats verses, and the guests drop red rice over the heads of the boy and girl. At the lucky moment the cloth is snatched to one side, the boy and girl throw garlands round each other's necks, and the musicians beat their drums. Nosegays and betel are handed and the quests go home with betel packets. Shortly after the boy's mother, who returns to her house as soon as the marriage hour is over, and her relations, with cloths spread for them to walk on, are brought to the girl's house to present her with ornaments and clothes. Then follow the sacred fire or lajahom and the seven steps or saptapadi which are the same as among Marathi Brahmans. On the same or on the next day, a ceremony called sade or chauthdan or the last marriage robe-giving is performed when cocoanuts are taken from the boy's father and distributed among the guests. Several games are played by the boy and the girl, the women and grown girls siding with the girl and the youths with the boy. A plate filled with coloured water is set between the boy and girl and they splash the water over each other. One of them hides a betelnut or other small article and the other tries to find it, or one of them holds in his teeth a roll of betel-leaf or a bit of cocoa-kernel and the other tries to bite it off, or they play at odds and evens. In the evening the girl's parents give a grand dinner to the boy's friends. The guests used not to come to this dinner at the proper time and used to ask for dishes that were not ready or which were difficult to get; this practice is falling into disuse. At the close of the dinner the members of the boy's household are served with sweetmeats and the girl sits in turn on the lap of each of the elderly members of her family each of whom puts a little sugar into her mouth. The house people sit to dine and the girl taking a cup of boiling butter pours it in a line over the dinner plates and waves a lighted lamp before the faces of the diners, each of whom lays a silver coin in

the cup. After dinner the boy and girl leave for the boy's house when the boy carries off an image from the girl's god-room. There is great grief over the girl's leave-taking, the mother especially lamenting that her daughter is gone to a strange house. When they reach the boy's house his parents receive the couple at the entrance of the marriage hall. A wooden measure of unhusked rice is set that the girl may overturn it with her foot, a heavy lighted lamp is placed in her hands, and she and the boy are led into the house. A new name is given to the girl, and, in the presence of her father's relations, she is made to sit on the lap of each of the elder members of the boy's household who in turn drop a little sugar into her mouth. This ceremony is called hatilavne or committing the girl to the care of her new relations. The male quests who come with the return procession are seated in the marriage hall where a dancing-girl performs. The guests are told the girl's new name, and with a parting present of sugar and betel packets they return to their homes. Next day the boy's father treats castefellows and others to a dinner. At the end of the dinner the deities who have been asked to be present at the marriage are prayed to withdraw. After a few months the boy and girl go to her father's house, stay there for a couple of days, and return home. This closes the marriage ceremonies. Shenvis allow and practise polygamy, polyandry is unknown, and widow marriage is forbidden. On the first signs of pregnancy a party of women are called, the young wife is richly dressed, crowned with flower garlands, and fed on sweet food. A few relations and friends present her with clothes. When a Shenvi is on the point of death part of the ground-floor of the sitting room near the entrance door is washed with cowdung and covered with sacred grass and the body is laid on the grass with the feet to the south. When life is gone the body is taken outside, washed, rubbed, bound on a bamboo bier, and covered with a cloth. Four near relations carry the body on their shoulders to the burning ground, the son or other chief mourner walking in front holding by a string an earthen pot with a burning cake of cowdung. As they go the bearers in a low voice repeat the words, Ram Ram, or Shri Ram Jay Ram, or they mutter Narayan Narayan till they reach the burning ground when they make a pyre of wood and lay the body on it. The chief mourner goes thrice round the pyre from right to left, and lights it. Then all retire to some distance and sit till the body is consumed, when they go to their homes. Meanwhile, at the deceased's house a lighted lamp is placed on the spot where he died, and, as his soul is supposed to hover about the house for ten days, a cotton thread is hung from a peg into a cup of milk which is placed near the lamp to enable the soul to pass down the, string and drink. In the house of mourning, during the next ten days, a Brahman reads sacred books every afternoon, and balls of rice

are offered to help the soul to regain the different parts of its body. Friends and relations visit the mourners and send them presents of butter and pounded rice as nothing is cooked in the house. On the tenth day the chief mourner offers rice balls. If a crow touches one of the balls the soul of the dead is believed to have gone to heaven in peace; if the crow refuses the deceased is thought to have had some trouble on his mind. On the eleventh, under the belief that the deceased will have the use of them in heaven, the mourners present Brahmans with cows, money, earthen pots filled with water, rice, umbrellas, shoes, fans, and beds. On the twelfth and thirteenth water is offered and on the fourteenth the mourning family visit a temple near their house. They are then free to follow their every-day business. On the death day every month for a year rice balls are offered to the soul of the deceased. Shenvis are bound together as a body and settle social disputes at meetings of castemen. Most Shenvis are well off. A few of them draw salaries of as much as £50 (Rs. 500) a month. On the whole they are a pushing and rising class who send their boys to school and readily take to any promising calling.

TAILANGS.

Tailang or **Telugu** Brahmans are returned as numbering 100 and as found in Bhimthadi, Haveli, Khed, and Poona. They are said to have come into the district about a hundred years ago; whence and why they cannot tell. Their head-quarters are in Kasba Peth in Poona city. They are divided into Kasalnadu, Murikinadu, Telaganya, Vegnadu, and Velnadu, who eat together but do not intermarry. Their family stocks are Atri, Bharadvaj, Gautam, Jamadagni, Kaundinya, Kashyap, Pustsasa, Shrivatchhya, and Vaghulas. Marriages cannot take place between persons of the same stock. Their surnames are Bhamidivaru, Ghanti, Gunipudivaru, Innuvaru, Kampuvaru, Kandalvaru, and Kotavaru; sameness of surname is no bar to marriage. They are tall, strong, and dark. All men wear the mustache, some wear the beard, but none whiskers. Their home tongue is Telugu; with others they speak an ungrammatical and ill-pronounced Marathi. They do not own houses. Their household goods are a white blanket and a sheet, a wooden box, earthen water jars, and metal vessels. They keep neither cattle nor servants. They are great caters and have a special fondness for sour or ambat dishes. They are vegetarians, their staple food including rice, whey, and a vegetable or two. They get the grain they eat by begging, and spend $\frac{3}{4}d$. to $1\frac{1}{2}d$. ($\frac{1}{2}-1$ anna) a day. Before dining, besides sprinkling water and throwing pinches of rice to the right side of the plate, they repeat the name of the god Govind. They give dinners of sweet cakes in honour of thread-girdings and

marriages, a dinner to a hundred quests costing £3 to £5 (Rs.30-50) Except in the use of opium and snuff they indulge in no luxury. The men wear a short waistcloth, roll a scarf round the head or wear a Deccan Brahman turban, a coat or a waistcloth, a shouldercloth, and sometimes Brahman shoes. The women wear the full Maratha robe and bodice and draw the skirt of the robe back between the feet and tuck it into the waist behind. They mark their brows with redpowder, and tie their hair in a knot at the back of the head. They are clean, idle, hot-tempered, thrifty, and hospitable. They are beggars and make and sell sacred threads. Their begging months are February to July (Magh to Jyeshta) and their sacred threads are sold in August or Shravan when they make considerable sums. Their houses are generally hired at 6d. to 1s. 6d. (4-12 as.) a month, and the furniture varies in value from £1 to £2 (Rs. 10-20). Their monthly food charges vary from 2s. to 4s. (Rs. 1-15). A birth costs 10s. to £1 (Rs.5-10); a hair-clipping 4s. to 10s. (Rs. 2-5); a thread-girding £1 to £3 (Rs. 10-30); a boy's marriage £10 to £30 (Rs. 100-300), and a girl's £2 10s. to £20 (Rs. 25-200); a girl's coming of age 14s, to £1 10s. (Rs. 7-15); and a death £1 10s. to £4 (Rs. 15-40). They are religious. Their chief objects of worship are Kanakdurga of Bejvad in Telangan, the goddess of Pithapur and Vithoba of Jagannath. They also worship Ganpati, Mahadev, and the usual Brahmanic gods and goddesses. They are Smarts and their family priests are Brahmans of their own country. They keep the usual Hindu fasts and feasts, but on feast days both men and women go begging for a meal. If they fail they come home, cook some rice, and eat it with whey and salt. They show their Teacher Shankaracharya Svami great respect, and when he visits them after every second or third year each house pays him 2s. (Re. 1). Women do not generally go to their mothers' to be confined, they stay with their husbands. When a child is born the navel cord is cut by the midwife who is generally a Maratha woman; she is paid 2s. (Re. 1) if the child is a boy and 1s. (8 as.) if the child is a girl. If the midwife is asked to remain with the mother till the twelfth day she is paid 2s. to 4s. (Rs. 1-15) more. The navel cord is not buried but is kept to dry in the lying-in room. The child is bathed and laid beside its mother. If a woman is confined at her mother's, word is sent to her husband and to other near relations, and if the child is a boy sugar is handed among relations friends and acquaintances and money is presented to Brahmans; if the child is a girl nothing is done. For the first two days the child is fed by sucking a piece of cloth soaked in coriander juice or honey; on the third day it is bathed and the mother suckles it for the first time. They keep the fifth-day ceremony. In the afternoon in the mother's room a grindstone or pata is laid on the floor, on the stone is set an image of Satvai and the child's navel cord, and these are

worshipped by the midwife or by some elderly married woman of the family. In the evening they lay a blank sheet of paper, a pen, an inkpot, and a knife that the god Brahma may write the child's destiny. For the first twelve days the mother is fed on rice and butter. The members of the family are impure for ten days. On the eleventh they wash, change their sacred threads, and purify themselves by drinking and sprinkling the house with cow's urine. On the morning of the twelfth day the husband and the wife with the child in her arms worship the god Ganpati and Varun with the help of the family priest, and the priest gives the child a name he has found in his almanac. A sweet cake feast is held in the afternoon, and in the evening the child is laid in the cradle and given a second pet name, and wet gram and packets of betel are handed among the women and children. The boys' names in common use are, Bhimaya, Nagaya, Narsaya, Peharaya, Ramaya, Somaya, Suraya, and the girls', Gangama, Nagama, Narsama, Perama, Ramama, Singama, and Somama. When a child is six months old it is given solid food for the first time and Brahmans are feasted. If the child is a boy his head is shaved when he is three years old, leaving a tuft of hair over each ear and a forelock. Girls' heads are not shaved unless they are the subject of a vow. A boy is girt with the sacred thread between eight and eleven, The day before the girding an invitation is sent to the village god accompanied by music. On the thread-girding day a sacrificial fire is kindled on the altar and the sacred thread is fastened round the boy's neck and his right arm. A dinner is given to relations, friends, and other Brahmans, and money is distributed among Brahman and other beggars. The Tailangs marry their girls between six and eight and their boys between twelve and twenty-five. The asking generally comes from the girl's side. When the parents agree Brahmans and other relations and friends are called to witness the settlement. Sweetmeats are given to the girl, packets of betel are handed to kinspeople and friends, and money is paid to begging Brahmans. On the marriage day the devapratishtha or enshrining of the marriage-guardians takes place, and a dinner is given to relations and friends. The girl's father presents the boy with a new turban, sash, and waistcloth, and his mother with a robe. The boy and girl are rubbed with turmeric at their homes, and the boy is carried on horseback to the girl's in procession and he and the girl are made to stand facing each other on two low wooden stools. A piece of yellow cloth is held between them, marriage verses are repeated by the priest and other Brahmans, and the sacrificial fire is kindled on the altar, on the four corners of which, unlike other Hindus, they do not place earthen pots. A turban is presented to the girl's brother, betelnuts and leaves are handed to the relations and friends, and money is paid to religious beggars, the all retire. When the

marriage ceremony is over the hems of the boy's and girl's robes are tied together and they are taken into the house to bow to the house gods. On the second and third day the boy's relations are taken to dine at the girl's house, and, on the fourth day the last marriage robegiving or *sade* is performed, when the boy's relations go to the girl's house, and present the girl with ornaments and clothes and five married women with turmeric and redpowder, and fill their laps with pieces of cocoanut. The parents of the boy and girl exchange presents of clothes, and the boy, accompanied by relations and music, takes his bride to her new home. Here the goddess Lakshmi is worshipped, money is given to religious and other beggars, and betel packets are handed to the guests. When the procession returns to the boy's house the boy and girl are seated each on the shoulder of a man who dances to music.

When a Tailang Brahman is on the point of death part of the groundfloor of the house is cowdunged, tulsi leaves and sacred darbha grass are sprinkled over it, a white blanket is spread, and the dying man is laid on the blanket. The family priest dips his right toe into a spoon full of cold water and a near relation pours the water into the dying person's mouth, and money and grain are presented to the poor. When life is gone the body is brought out, washed, and wrapped in a white sheet. Sacred basil leaves are stuffed in the ears, and the body is laid on a bier which is carried by four men to the burning ground, the bearers repeating Ram Ram. The chief mourner walks in front of the bier holding by a string an earthen pot with, burning cowdung cakes. When they reach the burning ground the bier is lowered near running water. Water and sacred grass are sprinkled on a piece of ground and a pile is built. The corpse is washed and laid on the pyre. If the deceased died at an unlucky moment wheaten figures of men are made and laid on the corpse. While the fire is being kindled verses are. repeated and the chief mourner lays some burning cowdung cakes under the pile. When the corpse is burnt the chief mourner thrice goes round the pyre holding in his hand an earthen pot full of water. At each turn a hole is bored in the pot with a pebble picked somewhere on the road and at the third round the pot is dashed on the ground. The pebble is kept as the stone of life or ashma and over it sesamum and water are daily poured. The ashes are thrown into water and they return home. On the second day a three-cornered earthen mound is raised on the spot where the body was burnt, and on it five earthen pots are placed, and cooked rice, rice balls, and wheat cakes are offered to the dead. The stone is taken to the river, washed, and carried to the house of mourning. From the third day to the ninth a rice ball is offered and the stone of life or ashma is taken to the

burning ground and again brought back to the house of mourning. On the tenth day all the adult male members of the house go to the river, offer cakes and rice balls, and after setting up red flags six inches high, ask the crows to touch the chief ball of the five. As soon as the ball has been touched by a crow the mourners pour water and sesamum over the stone and throw it into the river. They then bathe and return homo. On the eleventh day the mourning is over. A sacrificial fire is lit in the burning ground and money is distributed among beggars. On the twelfth day the offering of rice balls or sapindis is performed and Brahmans are feasted. On the thirteenth day the *shraddh* is performed and this is repeated at the end of each month for twelve months. At the end of the twelve months the first anniversary is held and is repeated every year so long as one of the deceased's sons remains alive. They hold meetings to decide their social disputes composed of learned Tailang, Deshasth, and other Maratha Brahmans. A man proved to have drunk liquor is fined 2s. to £1 (Rs. 1-10), and any one who forms a connection, with a woman of the Mhar, Mang, or other low class is turned out of caste without hope of forgiveness. If the woman is a Musalman the Brahman's mustache is shaved and he is allowed back to caste after drinking cow's urine. They send their boys to school and are a poor people.

TIRGULS.

Tirguls are returned as numbering 300 and as found over the whole district except Maval and Shirur. Their origin is not known; they are believed to have come into the district from Telangan about two hundred years ago. They have no subdivisions, and the commonest names among men are Atmaram, Martand, Ramchandra, and Vishnu; and among women Krishna, Lakshmi, Radha, and Savitri. Their surnames are Arankelle, Arole, Bhinge, Javalkar, Kodgule, Mahajane, Mahashabde, Maindarge, and Supekar. They have five family stocks or gotras, Bharadvaj, Kaushik, Kashyap, Lohit, and Napa, and persons having the same family stock cannot intermarry. They speak corrupt Marathi, live in houses of the better sort, and are vegetarians. Both men and women dress like Maratha Brahmans, and are clean, thrifty, hospitable, and hardworking. They are traders, bankers, landowners, writers, and betel-vine growers. As they kill insects they are considered impure. A family of five spends £1 4s, to £2 (Rs. 12 - 20) on food a month, and £2 10s. to £5 (Rs. 25 - 50) on clothes. A house costs £50 to £200 (Rs.500-2000) and 4s. to £1 (Rs.2-10) to rent. The value of their house goods is about £10 to £100 (Rs. 100 -1000). A birth costs 10s. to £1 (Rs. 5-10); a hair-clipping 10s. to 16s. (Rs. 5-8); a thread ceremony £2 10s. to £20 (Rs. 25-200); a marriage £20 to £50 (Rs. 200-500); a puberty £3 10s. to £20 (Rs. 35-200); and a death £2 to £5 (Rs.20-50). They are Smarts and worship all the Brahmanic gods and goddesses and keep the ordinary Hindu fasts and feasts. They go on pilgrimage to Allahabad, Benares, Nasik, Pandharpur, and Tuljapur. Their customs are the same as those of Deccan Brahmans. They have a caste council and settle social disputes at meetings of castemen. They send their boys to school and are well off.

VIDURS.

Vidurs, [The Vidurs tell the following story to explain the origin of their name. A king named Shantanu walking by a river saw and loved a beautiful maiden. He asked the girl to marry him and after some hesitation she agreed. She told him that she was the river Ganga and warned him that if he ever questioned her conduct she would at once disappear. The king promised to ask no questions and they lived together as husband and wife. Ganga bore him several children. No sooner Was a child born than the gueen threw it into the river. The king endured the loss of his children in silence. At last when a child named Bhishma was born he complained to his wife of the loss of his children and begged her to spare Bhishma's life. No sooner had he spoken than Ganga turned to water and flowed off into the nearest river. After some time king Shantanu again walked by the river, saw a beautiful girl in a boat, and she agreed to marry him on condition that her son should succeed. This the king promised as Bhishma, Ganga's son, said he had no wish to rule. A son named Chitrangad was born and succeeded his father. He married two wives but died childless. On his death his mother sent one of the wives to the sage Vyas to raise an heir to the throne. A blind child was born and could not succeed. The second wife was sent and a leprous child was born who too could not rule. The queen-dowager then sent one of her son's slave-girls and a boy was born and called Vidur because he was the son of a slave. He succeeded to the throne and from him all Vidur Brahmans are sprung.] that is the Illegitimate call themselves Brahmaniais. They are returned as numbering 100 and as found over the whole district excepting Khed, Maval, and Purandhar. They have no subdivisions and their surnames are Baraskar, Davare, Kalangade and Vaikar,; families bearing the same surname do not intermarry. Their staple food is millet, rice, and pulse, and a family of five spends £1 10s. to £2 (Rs 15-20) a month. They do not eat fish or flesh and drink no liquor. They dress either like Marathas or Brahmans, and are writers, printers, and messengers. They think themselves higher than Marathas, and a little lower than the ordinary Maratha Brahmans. Their family goddess is

Bhavani of Tuljapur, and they also worship Khandoba and Bahiroba of Jejuri. They have house images of Ganpati, Mahadev, and Vishnu, and their priests are the ordinary Deshasth Brahmans. Their fasts and feasts do not differ from those of ordinary Brahmanic Hindus. Their boys are girt with the thread before they are ten. The priest pours a few drops of the *panchgavya* or five cow-gifts on the boy's right palm, and, after he has taken a sip, the priest repeats a sacred verse over the thread and puts it round the boy's neck. He is paid 6*d. to 2s.* (4as.-Re. 1). They marry their girls before they come of age and their boys between sixteen and twenty. The texts repeated at their marriages are from the Purans, not from the Veds. In other respects their ceremonies are like those of Deshasths. They burn their dead, and practise polygamy but not polyandry. They send their boys to school and are a poor people.

WRITERS

Writers included four classes with a strength of 1500 or 0.17 per cent of the Hindu population. Of these about thirty persons who are returned as Patane Prabhus in the census were Dhruv Prabhus, 832 were Kayasth Prabhus, 206 were Patane Prabhus, and 423 were Velhalis.

DHRUV PRABHUS.

Dhruv Prabhus, literally Lords descended from Dhruv, are found only in the city of Poona. According to tradition, Dhruv, from whom they claim descent, was the son of Uttanpat, a Kshatriya king of Oudh, whose name Uttanpat according to their story was the origin of the name Patane by which one of the two classes of Western India Prabhus is known, [Patane, according to Brahman accounts, is properly Patare or Fallen, because the Prabhus have fallen from being warriors to be writers. The Konkan traditions and to some extent the evidence of their home speech suggest that the Patane Prabhus of the Thana coast are descended from Rajputs of Anhilvada Pattan in North Gujarat, and may take their name from that town. Thana Statistical Account in Bombay Gazetteer, XIV. 90. Dhruv Prabhus claim to be the same as Patane Prabhus. Two or three years ago they applied to be readmitted into caste, but the Patanes refused on the ground that the two classes had been so long separate. The Dhruvs have many written statements from Poona Patane Prabhus stating that their ancestors had said the two classes were the same. The Dhruvs say they came as writers from Bombay and Thana to Poona during the time of the Peshwas and have since settled in the district. They have no

subdivisions. Among their surnames are Kotker and Mankar. They are like Bombay Patane Prabhus in appearance. They speak an incorrect Marathi, using n for n and l for l. Their houses are of the better sort, one or two storeys high with walls of brick and tiled roofs. They are neat and clean, and are well supplied with metal vessels, cups, saucers, bedding, carpets, cots, boxes, chairs, tables, glass and brass hanging lamps, and large earthen jars for storing grain. They have servants generally of the Kunbi caste, and keep cattle, ponies, and parrots. They are neither great eaters nor good cooks. There is nothing special or proverbial about their style of cooking or their favourite dishes. They eat fish and the flesh of goats, sheep, hare and deer, but they eat neither domestic fowls nor eggs. Those who are careful to keep caste rules do not drink liquor. Their staple food is rice, split pulse, wheat bread, vegetables, spices, pickles and salt; and they drink tea, coffee, milk, and water. At their marriage and other feasts the chief: dishes are, sugared rice, sweet, cakes, and pulse and wheat bails. They eat animal food on holidays and once or twice a week. It is the cost and not any religious scruple that prevents them regularly using animal food. They sacrifice a goat on *Dasara* Day in front of the goddess Durga and afterwards feast on the flesh. Both men and women dress like Deccan Brahmans, the women tie the hair in a knot behind the head and deck the hair with flowers. They keep rich clothes in store, shawls, gold-bordered silk robes and bodices, and silk waistcloths shouldercloths and handkerchiefs, valued at £20 to £60 (Rs.200-600). They have ornaments of gold, silver, pearls, and diamonds for the head, ears, nose, neck, arms, and feet, valued at £50 to £100 (Rs. 500-1000). They are neat, clean, hardworking, sober, honest, even-tempered, hospitable, loyal, and orderly They are English writers, moneylenders, and moneychangers. They claim to be Kshatriyas, eat from no one but Brahmans, and consider themselves higher than any caste except Brahmans. A house costs £100 to £200 (Rs. 1000 - 2000) to build, and 10s. to £1 (Rs. 5-10) a month to hire. House goods vary in value from £20 to £40 (Rs. 200-400). They pay their servant's 4s. to 8s. (Rs.2-4) a month with food. The feed of a cow or buffaloe varies from 8s. to £1 (Rs.4-10) a month. A family of five spend £3 to £4 (Rs. 30 -40) a month on food, and £4 to £6 (Rs. 40-60) a year on clothes, The birth of a child costs £3 to £4 (Rs. 30-40); a hair-clipping 4s. to 6s. (Rs.2-3); a thread-girding £10 to £20 (Rs.100-200) boy's marriage £50 (Rs.500) and a girl's marriage £20 to £30 (Rs. 200-300); a girl's coming of age £8 to £10 (Rs. 80-100) to both the boy's and the girl's father; a first pregnancy £5 to £10 (Rs. 50-100); the death of a man £7 to £10 (Rs. 70-100), of a married woman £5 to £10 (Rs.50-100), and of a widow £5 to £7 (Rs.50-70). They are either Smarts or Bhagvats, and have house images of

Ganpati, Mahadev, Vishnu, Ram, Krishna, and Annapurna. Their family deities are Indrayani at Alandi, Ekvira at Karli in Poona, Khandoba of Jejuri, and Bhavani of Tuljapur. Their priests are Deshasth Brahmans whom they greatly respect. They keep the usual Brahmanic fasts and feasts, and make pilgrimages to Benares, Pandharpur, Jejuri and Vajreshvari in Thana. A woman always stays for her confinement at her husband's. After the child is born the mother is washed in brandy and hot water. On the evening of the third day they set a high wooden stool in the lying-in room near the mother's cot, and laying a handful of rice grains on the stool place a betelnut on the rice, and present the betelnut with balls of rice or *modaks*. This is called the third-day worship or tinvichi puja. Wet split gram and cocoanut scrapings are mixed and a handful is sent to the house of all the people of the caste. feast of rice balk is held in the evening when near relations are Called. On the evening of the fifth day a high wooden stool or a winnowing fan is set in the mother's room, and on it is laid a tak that is a small square metal plate with an image of the goddess Satvai impressed upon it, and the Brahman family priest worships it. Sixteen dough lamps are set round the image and rice balls are offered to it. Relations and friends come to dine and the women keep awake till midnight talking. Next day, the sixth, rice balls are made ready and offered to the goddess, and, on the day after, the image is put in a box and kept there till the next child is born. The mother and her family are considered unclean for ten days. On the eleventh day the room is cowdunged, the cot washed, and the mother and child are dressed in fresh clothes. On the eleventh day the men change their sacred threads and name the child if it is a boy on the thirteenth and if it is a girl on the twelfth day. A feast is held when gram balls are prepared and relations and castepeople are ask to dine. In the evening female guests bring some grains of rice, a cocoanut, and a coat and cap or *kunchi* for the child. The child is laid in the cradle, songs are sung, and the child is given a name by some elderly woman in the house. The presents brought by the women are taken from them, and in return a cocoanut, some sugar, and a betel packet are given them, and they go home.

A boy's hair is first cut between his third and his fifth year, when the barber is presented with a new handkerchief, some grains of rice, a cocoanut, and 1s. to 2s. (8 as. - Re. 1) in money. On any day after this, without performing any ceremony, they shave the child's head except the top-knot. Their boys are girt with the sacred thread between eight and ten. Two days before the ceremony an altar is raised and on the same day the boy is seated on a high wooden stool with a penknife and a cocoanut in his hands and is rubbed with wet

turmeric powder. He is then bathed along with his father and mother. A day before the thread ceremony the father takes a pole called the lucky pole or muhurt-medh, and, tying to its top an umbrella, a handful of dry grass, a couple of cocoanuts, and a piece of yellow cloth with grains of Indian millet in it, fixes it on one side of the house when it is worshipped by the boy and his parents. Then the god Ganpati is worshipped in the first room or osri on entering the house. In the women's hall a red or yellow piece of cloth is spread in a bamboo basket or padali, and the image of the household family goddess or kul-svamini is laid in the basket and worshipped. An earthen pot is whitewashed and marked with yellow green and red, and in it are laid grains of wheat or rice, a betelnut, a piece of turmeric root, and a 36d. (¼anna) piece. The lid is closed and thread is wound round the jar and it is set near the basket. This pot is called the quardian or devak, A lighted stone lamp is set before it and fed with oil till the thread ceremony is over. They then come on the veranda or oti, lay a leafplate on the ground, and on the leaf lay some grains of rice and a gourd or kohola. The gourd is worshipped by the father, the mother, and the son. Then the father takes a sword, and while his wife stands with her fingers touching his arm, he cuts the gourd into four pieces two of which are set aside and the remaining two are sliced into small pieces, cooked, and eaten. Then the women take a frying pan or kadhai, pour oil into it, and put a ladle in each of its handles., From the ladle a gold neck ornament called *vairatik* is hang and worshipped by the women with sugar and a copper pice (1/4 anna). When this is over they begin to make sweetmeats in the pan. Several other ceremonies are performed as preliminaries to the thread-girding. One of these rites is called *varun-puja* or water-worship, when they worship a pot or kalash full of water; a second rite is called shivaapah-santu, literally may the waters be fortunate, when the Brahman drops cold water from a mango leaf on the heads of the boy and his parents; a third is *nandishraddh* or joyful-event ancestor-worship when ancestors are asked to the ceremony; a fourth is bhumi-puja or earth-worship; a fifth is navagraha-puja or nine-planet worship; a sixth is rudrakalash-puja, or Rudra's pot-worship when the Rudras are worshipped by taking a water-cup or panchapatri, filling it with water, setting it over a cocoanut, and lighting the sacrificial fire; a seventh is balipradan or offering-giving, when cooked rice is laid in a bamboo basket and over it is set a dough lamp with a wick of black cloth, and in it a piece of the gourd which was cut in four parts, the whole is sprinkled with *udid* pulse and redpowder, and laid on the roadside by one of the house servants. The day ends with a feast. On the morning of the thread ceremony day the boy is seated in front of the Brahman priest who pours butter or loni and water in a cup and hands it to the

family barber. Then a razor is taken from the barber, sprinkled with water, and with it a blade of the sacred grass is cut over the boy's right ear, then behind his head, and then on his left ear, and the razor is handed to the barber who rubs the butter and water on the boy's head and shaves it. The boy is bathed, his head is shaved a second time, and he is again bathed He dines from the same plate with his mother; gold, silver, and pearl ornaments and flower garlands are fastened round his neck; lines of redpowder are drawn over his head; and he is made to stand near the altar on a low wooden stool covered with sack-cloth. his father sits before him facing him, and a cloth is held between them. The Brahmans chant verses and at the end throw grains of rice over the boy's head, the cloth is pulled on one side, and he bows before his father and sits in his lap. The boy is dressed in a loincloth, and the priest takes a sacred thread and fastens it from his left shoulder so that it hangs to his right hips. He also gives him a stick and a bag. The boy is told to look towards the sun, and the father taking him by his right hand asks him whose brahmachari or religious student he is. He answers, Indra's Brahmachari. Then the sacrificial fire is lit on the altar and the boy bows before it. The father takes a cup of queen's metal, fills it with grains of rice, and traces the letters of the sacred Gayatri verse on the rice, and the father tells the boy to repeat the verse. Then into the sacrificial ladle or pali a few grains of rice and a piece of sugarcandy are laid, and it is put in the boy's begging bag while he repeats the words Bhiksham dehi bhavati that is Give me alms. The father warns the boy to keep the sacred fire lighted, agni-rakshane; to guard the cow, gau-palane; and not to use the stick or dand. The guests present the boy with 1s. to 2s. (8 as. -Re. 1) in cash, and cocoanuts and betel packets are handed and the guests retire except a few near relations and friends who stay to dine. In the evening the boy is taken to his maternal uncle's house, a procession is formed, and he is brought home on horseback accompanied by relations, friends, and music. Before the boy enters the house rice and curds are waved round his head, and the quests retire with a betel packet and a cocoanut. Next day the threadceremony ends with a feast.

They marry their girls between nine and fourteen and their boys between twelve and twenty. The offer of marriage comes *from the girl's house. The girl's father with some friends* or relations goes to the boy's and in the presence of friends asks his father whether he will give his son in marriage to his daughter. If the father agrees the lucky days are chosen with the help of the family priest and the settlement or *tithi-nischaye* is performed. Then the marriage god or guardian is installed, and other preliminary customs are performed in the same

detail as at the thread-girding. They rub the girl with turmeric, tie a piece of turmeric root and betelnut to her right wrist, and send the rest of the turmeric or ushti halad to the boy's house accompanied by music, married women, and a mango twig. At the girl's the women fix the twig in the ground and a pair of cocoanuts are tied to it. The boy is rubbed with turmeric and bathed, and a piece of turmeric and betelnut are tied with cotton thread to his right wrist. On the morning of the second or marriage day a party of men and women go from the girl's to the boy's with music and carrying a plate containing a turban, a sash, a pair of shoes, a cocoanut, and sweetmeats. The boy is seated on a high wooden stool, worshipped by the girl's father, and presented with the clothes; hanging garlands of flowers are hung round his head, and the party retire. Then the boy's relations go to the girl's with music and a plate containing a robe and bodice, sugarcandy, cocoanuts, flower garlands, the marriage coronet or bashing, grains of wheat, and five betelnuts dates almonds and pieces of turmeric and some ornaments. The girl is seated on a stool 'and presented with the robe, bodice, and ornaments, and her lap is filled with dates, wheat, betelnuts, almonds, and turmeric. The boy's father presents the girl's father with a turban and the boy's party retire. The girl's mother, with her female relations, music, and sweetmeats, goes to the boy's house and gives the sweetmeats in charge to his people. The boy's head is shaved and he is bathed and dressed in a waistcloth, coat, turban, and shoes; flower garlands are wound round his head, and the girl's mother ties round his turban the marriage coronet or bashing, and gives him sweetmeats and a betel packet. The boy's father places a penknife and a cocoanut in the boy's hand and he is taken to bow before the household gods. He is then seated on a horse and led in procession to the girl's with a party of kinspeople and friends. When he reaches the girl's, cooked rice and curds are waved round his head and thrown on one side. Then the girl's father and mother come to the boy, the father walks once round the horse, and the mother waves a lighted lamp round his face, and they retire. The girl's brother comes forward and squeezes the boy's right ear, and he is presented with a turban. The boy is taken off the horse by some one near and is led into the marriage hall. His coat, shoes, and turban are taken off, and he is seated on the altar on a wooden stool covered with a blanket. The girl is by this time dressed in a white cloth with yellow borders, and seated near the marriage gods. The ceremony of honey-sipping or *madhupark* is performed, and the girl's mother washes the boy's sisters' feet and presents them with bodices. Then, after the boy's feet have been washed, the boy and girl are taken into the house and made to stand facing each other on two heaps of rice with a cloth held between them, Brahmans repeat the marriage verses, and at the end they are

husband and wife. They are then seated face to face on two chairs and a married woman fastens the marriage string round the girl's neck. A cotton thread is passed round the pair five and seven times by the priest. Then the girl's father, holding the boy's hands below the girl's, pours water over the girl's hands, and it falls over the boy's and from that into a plate on the ground. The boy's and girl's fathers put 2s. to 10s. (Rs. 1-5) into their hands and it becomes the property of the boy. Besides this the boy is presented with metal vessels and lamps, and the threads passed five and seven times are tied round the right and left wrists of the boy and girl. The boy's father presents the girl with a robe and bodice and the silver anklets called jodvis and viravlyas. The girl's father takes the boy and girl by the hand and seats them on the altar, and the sacrificial fire is lighted and fed with butter and parched grain. The girl rises from the stool and the Brahman lays on it seven pinches of rice and the girl worships them. The boy takes the girl's right hand in his right hand and the panigrahan or hand-clasping is over. Except near relations who stay for dinner the guests take betel packets and retire. When dinner is over the boy and girl are seated in a carriage or on horseback, and, accompanied by kinspeople friends and music, go to the boy's. In the room where the marriage god has been set the boy and the girl sit before the god and worship, throw grains of rice over it, and retire. The guests withdraw with cocoanuts and a cup of sweet milk. On the morning of the second day the girl's kinswomen go to the boy's and bring the boy and girl and their parents and relations to their house to bathe. In the marriage porch the boy and girl mark one another with wet turmeric and they are bathed. The boy's relations now retire. In the evening the boy's parents and near relations come again. Then sixteen small dough lamps are arranged with large lamp in the middle. A betelnut is worshipped by the girl's parents and the dough lamps are lighted. The boy and girl are now worshipped by the girl's parents and then by the boy's parents, and the bamboo basket is put over the heads of the boy and the girl, and the boy's parents and their near relations. The girl's father seats the girl on the lap of the boy's father and of his relations, and they return to the boy's house with the girl and the bamboo basket. The boy and girl are then seated near the marriage gods and the girl is called by a new name which is given her by her husband, Rice is thrown over the marriage gods with the object of inducing them to withdraw, and the wristlets or kankans and the marriage ornaments are tied in a piece of cloth and kept somewhere in the house. A feast at both houses is the last of the marriage ceremonies. When a Dhruv Prabhu dies, he is laid on a white woollen waistcloth or dhabli, and the toes of his feet are tied together with a string. The chief mourner's head and mustache are shaved, and he cooks rice and makes it into three balls or pinds,

one he lays in the house at the corpse's head, a second is afterwards laid at the place where the body rested on the way to the burning ground, and the third is laid on the mouth of the corpse when it is placed on the pile. When the skull bursts with the heat each mourner throws a piece of sandalwood on the pyre and the chief mourner in addition throws a cocoanut. When all is burnt the chief mourner, carrying an earthen jar of water on his right shoulder walks round the pyre with his left hand towards it. When at the end of the first round he is near where the corpse's head lay one of the mourners makes a hole in the pot with a pebble called the ashma or spirit picked up near the place where the bier was rested, and the mourner lets the water stream from the hole as he walks round the pyre. At the end of the second round a second hole is made and a second stream runs out of the pot and at the end of the third round a third hole is made and the pot is dashed on the ground. The chief mourner cries aloud striking his hand on his mouth. Either on the same or on the next day, a threecornered mound is made on the spot where the deceased was burnt. Sacred grass is spread on the mound and on the grass four small earthen jars are set filled with water, and over the jars four dough cakes and rice balls are laid. Flowers are strewn over the cakes and four small vellow flags are set in the ground and worshipped. The funeral party withdraw to some distance till a crow has touched one of the balls. After that they bathe and accompany the chief mourner to his house. When they reach the house of death they go inside, peep at the lamp which is burning on the spot where the dead breathed his last, say same words of comfort to the mourners, and go to their homes. The family mourn ten days, and, on the tenth, offer ten rice and ten dough balls on the burning ground. They anoint the ashma or stone of life with cocoanut oil, worship it, and after a crow has touched it, throw it into a river. The priest returns home, and is presented with a blanket, an umbrella, a brass lamp, and a pair of shoes. On the eleventh day the chief mourner and a few near relations go to the burning ground and cook rice, spilt pulse, vegetables, pulse cakes or vades, and wheat cakes or puran-polis, and make three rice balls to which the several dishes are offered. The whole is mixed together into three balls, two of which are burnt and one is thrown into the water. After a bath they return home. On the twelfth day alms are given in the name of the deceased; on the thirteenth a memorial ceremony or shraddh is performed and the caste is feasted; and on the fourteenth fourteen earthen pots are filled with water and presented to fourteen Brahmans along with 3/4d. (1/2 anna), and near relations are feasted chiefly on wheat cakes or puran-polis. Dhruv Prabhus are bound together as a body and settle social disputes at meetings of the

castemen. English education of late has weakened the authority of caste. They send their boys to school and are a steady class.

KAYASTH PRABHUS.

Ka'yasth Prabhus are returned as numbering 830 and as fond over \$he whole district except Junnar. They claim to be Kshatriyas. According to their story, after Parashuram had killed Sahasrarjun and king Chandrasen, he discovered that Chandrasen's wife had taken refuge with the seer Dalabhya and that she was with child. To complete his vow to kill the whole of the Kshatriyas Parashuram went to the sage, who received him kindly, asked him why he had come, and promised to grant his wishes. Parashuram replied that he wished to kill Chandrasen's wife. The sage produced the lady, and Parashuram, pleased with the success of his scheme, promised to grant the sage whatever he asked for. Dalabhya asked for the unborn child, and Parashuram, bound by his promise, agreed to spare the mother's life on condition that the child should be bred a writer, not a soldier, and that instead of Kshatriyas his descendants should be called Kayasths because the child was saved in his mother's body or kaya. The boy was married to Chitragupta's daughter, and was given the title of Prabhu or lord. Kayasths are divided into Chitragupt Kayasths, Chandraseni Kayasths, and Sankar Kayasths. The Chandrasenis have no subdivision except Damani Prabhus who in no way differ from the rest and have a special name only because they lived for a time at Daman in the North Konkan. Kayasths have gotras or family stocks and pravars or founders, and forty-two surnames. People bearing the same surname and belonging to the same family stock do not intermarry. In appearance Kayasths closely resemble Konknasth Brahmans. They are fair and middle-sized, with regular features and thick black hair. The men wear the top-knot and mustache, but neither beard nor whiskers. The women are fairer than the men and handsome. They wear the hair tied in a knot at the back of the head, use false hair, and deck their hair with flowers. Their home speech is Marathi, which both men and women speak correctly. Their houses are well stocked with furniture, copper brass iron and tin vessels, boxes, cots, bedding, glass hanging and brass lamps. Each family has a servant, and most have cattle, horses, dogs, parrots, and bullock carts. Their houses vary in value from £50 to £2000 (Rs. 500 -20,000); their furniture from £10 to £200 (Rs. 100-2000); a man's stock of clothes from £7 to £50 (Rs. 70 - 500); a woman's and a child's from £10 to £200 (Rs. 100-2000); their ornaments are worth £30 to £500 (Rs. 300 - 5000). They eat fish and the flesh of goats and sheep, but secretly as they prefer to be considered vegetarians, and

drink both country and foreign liquor. Their daily food is rice pulse, vegetable fish or pulse curry, milk, curds, and whey. They drink tea or coffee, are fond of good living, and their pet dishes are gram oil-cakes and wheat and sugar semicircular cakes or karanjas. A family of five spend every month on their food, if rich £5 to £7 10s. (Rs.50-75) if fairly off £3 to £4 (Rs. 30-40), and if poor £2 10s. to £3 (Rs. 25-30). Their feasts cost 6d. to 1s. (4 - 8 as.) a guest. Both men and women dress like Maratha Brahmans, and it is often hard to tell a Kayasth Prabhu from a Brahman. They are generally richly and most carefully and neatly dressed. Of ornaments well-to-do men wear gold necklaces and finger rings, and the women the same ornaments as Brahman women. They are hardworking, hospitable, orderly, and loyal; but extravagant and fond of show. They are writers, husbandmen, moneylenders, and moneychangers. They are generally Bhagvats or followers of Vishnu, and are termed Deviputras or Goddess' Children because they worship the early local mothers more than the regular Brahman gods. They have house images of Annapurna, Vishnu, Balkrishna, Bhavani, Ganpati, Khandoba, and Mahadev. Their priests are Deshasth Brahmans whom they treat with great respect. They keep the regular Hindu fasts and feasts, and settle social disputes at meetings of the castemen. On the sixth day after a child is born they worship the goddess Sathi and name the child on the twelfth. They gird their boys with the sacred thread before they are ten. They marry their girls before they are twelve, and their boys before they are twenty. The details of their birth, thread-girding, and marriage ceremonies differ little from those of Patane Prabhus. A thread ceremony costs them £10 to £50 (Rs. 100-500) and a marriage £50 to £500 (Rs. 500-5000). They burn their dead and do not allow widow marriage. They send their children to school and hold their own as writers in spite of the competition of Brahmans and other non-writer classes.

PATANE PRABHUS.

Pa'ta'ne Prabhus are returned as numbering 200 and as found only in the city of Poona. Only a few have been long settled in Poona. These, they say, came from Bombay about sixty years ago as clerks in Government offices, and after retiring from service settled in Poona with their families. The rest appear to have come also from Bombay as clerks within the last eighteen years and are not permanently settled in Poona. Poona Patane Prabhus have no subdivisions and deny that the Dhruv Prabhus belong to their caste. They say that they formerly had no surnames and that the fashion of using surnames has been introduced with the last twenty-five years. Their chief *gotras of* family-

stocks are Bharadvaj, Brahma-Janardan, Gargya, Gautam, Jamadagni, Mudgal, and Vashishth. The names in common use among men are Dhvarkanath, Moreshvar, Moroba, Sadanand, and Vishvanath; and among women, Hirabai, Nanibai, Sokarabai, and Sundarabai. The men are generally stoutly made and in height above the middle size with regular features; and the women are about the same size as the men, fair, and goodlooking. They speak purer Marathi than the Bombay Prabhus owing to their intercourse with Deccan Brahmans. The older residents own houses two storeys high with brick walls and tiled roofs, clean and well kept. They have servants, carriages, and horses as well as cows, parrots, or pigeons. Besides the ordinary Hindu cushions, carpets, and pillows, they keep in European style tables, benches, couches, chairs, chests of drawers, brass or wooden bedsteads, wardrobes, cabinets with ornamental knick-knacks, wall pictures, lamps, and chandeliers. Their cooking pots and eating and drinking vessels are generally metal. Their usual food is rice, wheat cakes, pulse, vegetables, fish, and mutton. Besides mutton the only animals they have no scruple in eating are the wild hog, deer, and hare, and of birds the wood-pigeon, partridge, quail, and water-fowl. Their caste rules are against the use of any other animals. Their drink is milk, coffee, and the, liquor being forbidden them. They have two principal daily meals, one between nine and twelve in the morning, the other between seven and ten in the evening. A family of five living in comfort spend £5 to £10 (Rs. 50 -100) a month; the poorer families live on £2 to £3 (Rs. 20 - 30). The men dress in a waistcloth, waistcoat or coat, and the Maratha Brahman turban, and English or Marathi shoes. The women dress in a full Maratha robe with the skirt drawn back between the feet and a tight-fitting bodice with a back and short sleeves. Out of doors and on ceremonial occasions they draw a shawl over the shoulders or head.

Most Poona Patane Prabhus are clerks in Government offices. One is a teacher of drawing and plan-making in the Poona College of Science, and another is a High Court pleader qualified to practise as a solicitor in Bombay; a third is a retired broker. Their boys attend the Government schools and colleges; some of them are matriculated and one has taken the degree of Bachelor of Arts and Bachelor of Laws. Some of them own houses and land, but most live in hired houses paying monthly rents varying from 10s. to £2 10s. (Rs. 5-25). Their house furniture is worth £50 to £100 (Rs.500-1000). Besides their every-day clothes they keep a store of rich garments and of jwels worth £100 to £500 (Rs. 1000-5000). A birth costs £10 to £40 (Rs. 100-400); a thread-girding £20 to £50 (Rs.200-500); the marriage of a son £150 to £400 (Rs.1500-4000), the marriage of a daughter £100

to £500 (Rs. 1000-5000); a girl's coming of age £10 to £20 (Rs. 100 - 200); a pregnancy £10 to £15 (Rs. 100-150); the death of an adult £10 to £30 (Rs. 100-800), and the death of a child 10s. to £1 (Rs. 5-10). Prabhu customs come under the six heads of marriage, pregnancy birth, infancy, thread-girding, and death.

Marriage.

[Marriage, in Sanskrit, is technically called panigrahan or handholding, the popular Sanskrit word for marriage is vivaha or mutual taking, and the common Marathi word is lagin that is union. Among Prabhus the wedding months are Magh or January-February, Falgun or February-March, Vaishakh or April-May, Jeshtha or May -June, and Margashirsha or November-December. If either the boy's or the girl's birthday falls in Jeshtha or May- June marriage in that month is risky and if it is the birth-month of both the marriage cannot take place. Marriage cannot be held when the planets Jupiter and Venus are hid, on any amavasya or no-moon, at the sankrants when the Dim passes from one zodiacal sign to another, or during the shinhast once in twelve years, when the planet Jupiter is in the constellation Leo.]

A child's marriage occupies its parents' thoughts from its earliest days. The choice is limited to families of the same caste and among castefellows to families of a different stock or *gotra*. Boys generally marry between ten and sixteen; girls between four and eight. The only form of marriage now in use is *Brahma-vivaha* or the Braham wedding according to which, besides giving a dower, the bridegroom receives presents with his wife. The ceremonies connected with marriage last over many months, and involve the spending of the savings of years. They may be brought under three groups, those before, those on, and those after the wedding day. The first group includes eleven heads, offer of marriage, comparison of horoscopes, goat-offering, daynaming, guest-asking, gift-making, booth and altar-building, pot-buying, god-pleasing, and gift-making.

offer.

In families, who have a young daughter, the women of the house fix on some boy as a good match. The family priest is sent for and the girl's father, handing him her horoscope and naming the boy's father, asks the priest to got to his house and offer the girl in marriage. If he approves of the offer the boy's father gives the priest one to two shillings, a cocoanut, and sugar, telling him to say that he has kept the horoscope without waiting to see if it agrees with his boy's. If not rich

enough to meet the cost of his son's marriage, the father says the times are unsuitable. The priest asks if he would wish the girl's family to help. The father says help would be welcome, and between them they agree on the sum the father wishes to have. These are unusual cases. The common practice is for the boy's father, without opening it, to place the horoscope either before the family gods, or in some other safe place.

Horoscopes.

After a day or two the father hands his boy's and the girl's horoscopes to his family priest to take to an astrologer. The astrologer compares their details and tells the priest whether or not they agree. The priest returns and tells the boy's father. A few days more and the girl's family priest comes to learn the boy's father's answer. If the horoscopes do not agree the girl's is sent back, and the priest is told to say that the horoscopes do not agree. If the horoscopes agree, the priest leaves with a cocoanut and a handful of sugar.

Betrothal.

There is no betrothal. In most cases, after the boy's father has accepted the proposal and the horoscopes are found to agree, the first ceremony is the goat-offering.

Goat-offering.

A day or so before the astrologer has fixed the wedding day a child, escorted by a servant, is sent to ask a few married women relations to a feast in honour of the family goddess, and on the evening of the same day a young he-goat is bought. Early in the morning of the feast day a room on the ground-floor is smeared with cowdung, and on a high wooden stool, in a square marked off by lines of white quartz powder, the image of the family goddess is set and worshipped by the oldest man in the family. The goat is brought into the room and made to stand in front of the goddess. One of the married women of the family comes forward, washes the goat's feet and sprinkles redpowder on his head, and, after waving a lighted lamp round his face, retires. The eldest man in the family lays a bamboo winnowing fan with a handful or two of rice in it before the goat, and taking a sword stands on one side, and, while the goat is eating the rice, with one stroke cuts off its head, and holding it up lets a few drops of blood trickle over the goddess, and then places the head in a metal plate under the goddess's stool. Except the head, which is left till the next day, the

flesh of the goat is cooked and eaten. [In some families the goatoffering ceremony takes place at midnight on the day before the
marriage and the goat's head is laid on the top of the marriage hall. In
other families it is offered at the time of the planet-propitiation, when
the blood is allowed to trickle on the cooked rice before it is left in the
corner of the street. In some families the flesh is eaten on the first,
and the head and feet on the second day. Again in some families,
instead of a goat, a cock is offered, its neck cut, and the blood
dropped on the goddess. As Prabhus do not eat domestic fowls the
cock is given to a married woman of the Maratha Kunbi caste, who
dresses it at her house, and eats some of it at the host's house with
liquor. In other families no animal is sacrificed. The guests being
feasted on sweet dishes either at the host's house or at a temple.]

Some day, about the same time as the goat-offering, the girl's parents send to the boy's house a present of fruit, sugar cakes, and other eatables. Like gifts are in return sent to the girl. [The details are:

Twenty-five to fifty cocoanuts, twenty-five to fifty sugar-cakes eight or nine inches across, two or more legs of mutton, and ten or fifteen fish sprinkled with redpowder and turmeric.]

Day-naming.

The day-naming ceremony has two parts, a general fixing of the day and a special religious rite. Two or three days after the exchange of presents the boy's parents send for their family priest and ask him to find out lucky days and months. This he learns from astrologers or other Brahmans, and partly on the priest's advice partly on family grounds, the boy's father and mother, after consulting the girl's family, fix one of two days.

One of these days, if the father of the girl approves, is chosen by the boy's father for the day-fixing or *tithi-nishchchaya*. The day before, the boy's family priest calls on the astrologer, and, on the morning of the day, boys from both families are sent to ask near relations. At the boy's home, about eight or nine in the evening when the guests have come, the boy's father takes a basket or two full of cocoanuts and sugar-cakes, and, with his guests the astrologer the family priest and other Brahmans, goes to the girl's house. Here they are met by the girl's father or some other elder and led into the hall. The astrologer is seated in the midst of the company with a lighted brass lamp, a slate and pencil, two blank sheets of paper, pens, an inkstand, a ruler, a few grains of rice, and some redpowder. He reads over both the horoscopes, sees under what constellations the boy and girl were born,

and by calculations on the slate finds out the lucky days and hours. He then tells the elders of both families the result, and with their consent fixes the marriage day or tithi. When the day is fixed the astrologer draws up a marriage paper, writing, after an invocation to Ganesh, the names of the boy's grandfather father and mother, then in like order the names of the girl and her relations, their family, the date of the boy's and girl's birth, and the day fixed for the marriage, finishing the paper with tables taken from their horoscopes. The whole is read aloud, spotted with redpowder, and a copy is given to the elders of each house with a blessing and marking of redpowder. Each family gives the astrologer 1s. to 2s. (8 as.-Re.1), cocoanuts and of sugarcakes are handed, and, according to their rank, silver or copper coins are given to the other Brahmans. This ceremony costs each of the families £1 to £3 (Es.10-30). [The details are: Cocoanuts Rs. 5 to Rs. 15, sugar-cakes Rs. 1½ to Rs. 5, gifts to Brahmans Rs. 5 to Rs. 10, total £ 3s, to £3.1

Guest-asking.

Three classes of guests are asked each in a different way. Friends and caste fellows are asked by children, women relations by the women of the house, and men relations by letter. A fortnight or so before the wedding day, about noon, both families send four or five boys and girls, with one or two servants and drummers, to bid friends and caste people to the wedding. When they reach a house the girls hurry in and give their invitation to the women of the family in four words, Somvari navagraha Mangalvari lagna, that is, Monday the nine planets' worship Tuesday the wedding. [Monday and Tuesday are used vaguely; the actual days are generally found out from the family priest. Then, without an answer, they leave, delighting in hurrying from house to house and if asked for particulars shouting back answers from the street. When the girls go inside, the boys stand in the doorway and call out, 'Is any man at home,' If no one comes they either shout that so and so has asked them to a marriage or chalk a message on the front door. If one of the men of the house comes out, the boys stand before him with folded hands and repeat a very courteous and elaborate invitation, including the whole family and any guests that may be with them. Of late the practice has been introduced of asking male friends and caste fellows one or two days before the wedding by cards distributed by a Brahman or a house servant in the name of an elder of each family.

A few days later, about a week before the marriage, the girl's mother, with two or three other women and one or two children and servants,

goes in the afternoon to the house of the boy's parents. From the boy's house she takes his mother and two or three other women, one or two children, and servants with empty bags to hold cocoanuts, and they start in horse carriages to ask their kinswomen. When they come to a house they alight, go in, and give the invitation. Low wooden stools are set and they are asked to sit down, and, if they are near relations, they are offered sweetmeats on English plates. After eating a little and washing their hands, betel is handed, and at parting the boy's and the girl's mothers are each given a cocoanut. If the people called on are not near relations, they offer the mothers nothing but a cocoanut each. The women of some families are asked only for the marriage day. Others are asked to stay for five days while the ceremonies are going on, and the mother of one of the sons-in-law is asked to send her boy to take part in the gourd-cutting ceremony. The work of asking the female relations of both families takes four or five hours a day for three or four days.

Gifts.

Four days before the marriage the boy's mother sends a servant to the girl's house to ask her to come the next day for the flower- giving. Next day, in the afternoon, a child dressed and seated in a Palanquin or carriage is sent with music to fetch the girl to the boy's house. The girl, who is dressed in velvet and decked with ornaments, goes with the child. When she reaches the boy's house she is met by the women of the family and seated on a wooden stool. After dining, she is dressed in a rich petticoat or *parkar*, or in a gold-embroidered robe and bodice, and decked with jewels and flowers. She is shown to the older men of the family and given five to ten dishes of fruit and sweetmeats. [This practice is becoming uncommon; instead of sweetmeats and fruit the girl gets a money present of £1 to £2.] Then she is sent to the nearest relations of both families, the women asking her what her mother-in-law has given her. This round of visits generally lasts all about nine in the evening when the girl goes home.

Next day, like the girl, the boy goes to the house of the girl's parents in a carriage, where, if of age, he is met by the men, and if under twelve by the women, and seated on a chair in the hall. After an hour or so he dines, and is given a new suit of clothes, a turban, a waistcoat and coat, a handkerchief, and a waistcloth, and in some families a pair of patent leather English shoes and silk stockings and garters. Long flower garlands are hung round his neck, a garland is tied to each wrist, and a nosegay is placed in his hand, and like the girl he gets a

money present of £1 10s. to £3 (Rs. 15-30).

Booth-building.

During this interchange of gifts, at both houses stores of ornaments, and dress, supplies of rice, pulse, oil, butter, sugar, fruit, spices, betel, bamboo winnowing fans, and earthen pots are laid in, and a wedding booth or hall is built.

Altar-raising.

In the bride's house, after the booth has been some days ready, a bricklayer is called, given earth and bricks, and told to make an altar or bahule near the house-steps. Measured by the bride's arm this altar is three cubits long, three broad, and one high. In front is a step about a span square, and behind the back rises about eighteen inches above the altar in three six-inch tiers each narrower than the tier below it. When finished the whole is whitewashed, For this, besides a rupee; the bricklayer is given a handkerchief, some rice and betel, and a cocoanut.

Pot -buying

The day before the wedding a set of forty-six earthen pots white washed and marked with red, green, and yellow lines, are piled four or five high at each side of the marriage god, of the house, and of the altar.

Turmeric-rubbing.

The next ceremony is the turmeric-rubbing. One or two day before the wedding day, at the houses of both families a large wooden mortar and five long wooden pestles are washed and placed in the women's hall. Early next morning a girl is sent to ask the nearest kinswomen and a second message is sent them about nine. About ten or eleven, the guests meet in the women's hall and sit chatting on the groundfloor till noon or later. Then in the Women's hall the women of the house or the guests trace two squares opposite each other with white powdered quartz or rangoli. In one square is set a low wooden stool and in the other square a two-feet high wooden mortar or ukhli, hung with garlands of bachelor's-button flowers or roje. The boy is called in dressed in his waist cloth, and set on the low wooden stool in front of the mortar. A few pieces of turmeric are put in the mortar, and five married girls, each with a pestle, pound the turmeric and sing. After a

few strokes four of the girls leave, and one, a sister or other near relation of the boy, goes on pounding till the turmeric is powdered. She takes out the powder, puts it in a metal cup or vati, and mixing it with water rubs it over the boy's body. Then the four other girls come back, and each of the five rubs some turmeric powder on her own hands and eats some grains of coriander or dhane and molasses. Next, at one end of the marriage hall, one of the girls traces afresh white powder square, setting in it a low wooden stool. The others bring four metal water-pots or tambes filled with cold water and set them one at each corner of the square with a mango leaf floating in each and a cotton thread passed, once round them, and a servant brings a bathing pot filled with warm water and sets it near the low wooden stool, When this is ready the girls go into the house, bring the boy, and seat him on the stool. Then each girl lifts a water-pot, and, while the drummers beat their drums, the girls sing and let water trickle from the point of the mango leaf on the boy's head. When the singing is over four of the girls leave, and the girl who rubbed the boy with the turmeric powder bathes him in warm water. When he is bathed the boy is dressed in a fresh waistcloth and decked with a chaplet of bachelor's-button flowers. Red lines or *nand* are drawn on the upper part of his feet, a lighted lamp is waved round his face, and he is led into the house. At the girl's house, with the same ceremonies, the girl is rubbed with turmeric powder and bathed. The boy and girl are now sacred. They are called bridal gods or navardevs, and may not leave the house till the four wedding days are over.

God-calling.

A number of rites, calling Ganesh, the marriage-booth spirit, the water goddess, ancestors, and the planets, and the sacrifice of a gourd, and a fig branch, are performed with the same detail at both the bride's and the bridegroom's. In the afternoon, when the turmeric rubbing is over, to call the god Ganesh, the women guests, with lines of white powdered quartz, trace a square in the inner part of the marriage hall in front of the house steps. In the square four stools are set, three in a line and the fourth close by at right angles to the three, and in front of the three stools matting is spread. The family priest and other Brahmans seat themselves, the family priest on the fourth stool, and the other Brahmans on the mats. The family priest's assistant goes into the house and brings a silver plate, a cup, a ladle, a pot, a bamboo basket, a gourd, and a tray filled with flowers, fruit, and scented powders. The details are Cocoanuts, betel, flowers, basil or tulsi leaves, plantains, rice, cotton wicks, camphor, frankincense, sandal-powder, clarified butter, milk, curds, honey, sugar turmeric

powder, redlead, yellow, red, and scented powders.] When all is ready the family priest goes into the house and calls the parents. They come, the father wearing a silk turban and a waistcloth and a shawl thrown either round his shoulders or tacked under his arm; the mother in a silk bodice robe and shawl; and the child in a cotton Waistcloth and a handkerchief tied to the neck and hanging down the back. Laying a cocoanut before the house gods and bowing to the older men and women, they seat themselves on the three stools, the father next the priest, the mother on his right, and the boy or girl beyond her. The priest touches with redpowder the child's and the parents' brows, and repeats texts, and the father thrice sips water and sits bowing till the priest has repeated the names of the twenty-four gods. The father takes a round bamboo basket, and, spreading a yellow cloth over it, sets on the cloth a handful of wheat, and on the wheat sixteen betelnuts and six mango leaves rolled into cigar form, with a knife stuck into one of them, and tied with thread. Next, on a metal plate, the father lays half a pound of rice, and on the rice sets four betelnuts, three in a line and the fourth in front, representing the god Ganesh, his two wives Siddhi and Buddhi and the family goddess. Then, raising his joined hands, he calls on the god and the goddesses to come and stay in the nuts till the marriage is over. He then sets the nuts in another metal plate, pours on the top of each a drop or two of milk, some curds, clarified butter, honey, sugar, and water, mixed with sandal powder, and holding over them a metal water-pot with a hole in it lets water drop on them. He wipes them dry, sets them on the rice as before, marks them with sandal powder, and throws over them a few grains of rice, some dark red and yellow powder and flowers waves burning frankincense and lighted butter lamps round them and lays before them a little sugar, a cocoanut, a plantain, two betel leaves and one nut, and a small copper and silver coin. Again he waves lighted camphor, and, taking a flower in both his hand after the priest has recited texts over it throws it on the god's head. The whole ends with a prayer that the gods may continue kind till the marriage rites are over. All this time the mother sits still now and then touching her husband's right elbow with the tip of the first finger of her right hand. The child has nothing to do.

Booth Spirit.

After the worship of Ganesh comes the calling of the booth-spirit. While the child and its parents are seated on their stools, a married woman draws red lines and lays a wreath of flowers on a gourd, and close by the priest places a forked mango post and a pair of cocoanuts tied together by their fibre. A servant brings a long pole, and laying it

down ties to its top an open umbrella, a pair of cocoanuts fastened by the fibre, and a bunch of mango leaves. Four married girls, singing songs, wave rice over the gourd, the forked mango post, and the pole. As they sing they hold a mango leaf cup filled with oil over the gourd, the mango post, the pole, and lastly over the head of the boy. Then leaving their seats the father, mother, boy, and priest go to a corner in the marriage hall where a hole has been dug, and standing in the order in which they sat, worship the hole, dropping into it a few grains of wheat a copper coin, and a little water. A servant now sets the pole in the hole, fixing it in its place by filling in earth and stones, and plasters the ground round it with cowdung. A married woman draws lines with quartz powder, and the father, passing a cotton thread three or four times round the pole, worships it. When this is done all go back and sit on their stools as before.

Water Gods.

Then Ganesh is called and two brass water-pots filled with cold water are placed on a few grains of rice in front of the father. In the water is put a little turmeric and sandal powder, a few grains of rice, small silver and copper coins, bunches of mango leaves, a few blades of bent grass or durva, and cocoanuts on the top. A cotton thread is thrice passed round the whole, and with the middle finger of the right hand the father draws four lines of sandal powder on the outside of the pots, and with open hands prays Varun the water-god to be kindly. As the father sits with his legs doubled under him resting on his toes, he takes one of the two pots in his open hands and with the pot thrice touches his brow and right shoulder and the brows of his wife and child. He next pours water from the hands on the palms of the Brahman assistants, throwing on the water sandal powder, a few grains of rice and some flowers and betel, and finishes with a copper pice (1/4 anna), which he dips in water before laying it on the Brahman's hand, [Money or dakshana given to a Brahman is dipped in water that it may not be consumed by the fire that burns in a Brahman's hand. Lifting the water-pots one in each hand and crossing hands he pours water from both together in one unbroken stream into the metal plate. The parents change places, the father taking the mother's seat and the mother the father's, and the priest standing up with three other Brahmans and dipping a blade of bent grass into the metal plate sprinkles water over the parents' heads. Then the parents sit as at first on their low stools and the Brahmans also take their seats. The priest next lays the metal plate before the parents, who dip in their forefingers and touch their eyelids with the water. A married woman coming from the house waves a lighted lamp first before the

god Ganesh, then before the family goddess, then before the two water-pots, the priest, the father, the mother, and the child. The priest lays in the mother's lap a cocoanut, two leaves and a betelnut, and with a prayer that she may have eight sons this part of the ceremony closes. [Either in the ease of the bride or of the bridegroom, if the father and mother are dead their place is taken by some near relations, a brother and his wife or an uncle and aunt. Where there are no near relation any member of the same stock or *gotra* may sit. The only exception to this rule is that when the father is a widower he sits alone with a betelnut tucked to his waist in place of his wife.]

Ancestore.

Next to keep the house free from uncleanness and to call the spirits of forefathers, the father, taking four blades of bent grass between the fingers of his right hand, with the left hand pours water on his right palm, and prays the gods goddesses and ancestors to be present during the marriage and the next four days. Then striking a copper coin against the metal plate he opens the fingers of his right hand and lets the blades of grass fall.

Ganesh Worship.

The father then takes an earthen jar called the *avighna-kalash* or hinderance-removing-jar and fills it with rice. On the rice he sets a betelnut, a piece of turmeric, and a silver coin. He spreads mango leaves over the top, and on the leaves lays a cocoanut and winds cotton thread round the whole. On the outside of the jar he draws five lines of sandal powder, worships the jar, bows to it with joined hands, and pulls the round bamboo basket before him. The boy's mother puts the six rolled mango leaves into a metal plate, waves a few grains of rice thrice round the leaves, and taking in her hand the sixth leaf in which is the penknife, crushes a few grains of rice on the floor, and replaces the leaves in the basket. The father places a cotton bodice, a cocoanut, betelnut and leaves, a plantain, and a silver coin in the basket, and prays the water-goddesses or *jalamatrikas* to stay in his house till the ceremony is over.

Gourd-offering.

A gourd is brought in and laid on a wooden stool close to the altar. A son-in-law of the family, holding a shawl under his arm, and behind him his wife also covered with a shawl and with a metal pot of turmeric powder in her hands, come into the marriage hall. One of the

married women of the family ties together the skirts of the two shawls, and with a sword given him by the priest the son-in-law cuts the gourd in two, The wife rubs the two pieces with turmeric and steps back. Then with two more strokes the son-in-law quarters the gourd. The wife as before rubs turmeric powder, and Wave a lighted lamp in front of her husband, who receives from his father-in-law either a shawl, a turban, or a waistcloth, and withdraws.

Gods-installing.

When the presence and the goodwill of the gods are secured, the next step is to set them in some part of the house where they will be comfortable and safe. While the parents, the child, and the priest are seated as before, a married woman comes holding an earthen water jar, and after standing before the worshippers moves towards the house scattering drops of water as she goes. After her the mother walks with the earthen water-pot in her hands; the father with the round bamboo basket, and the six rolled mango leaf goddesses or matrikas; the son-in-law with the drawn sword, the forked mango post, and the pair of cocoanuts; the priest with a pot containing a few grains of rice and sandal powder; and last of all the child and a few under-priests. They enter the house and in this order go to one of the ground-floor rooms, where, some days before, a high wooden stool has been placed with two heaps of rice piled on it and the walls adorned with pictures of gods and in the centre with the picture of a fruit-laden mango tree. On the stool on one of the heaps of rice, the mother sets the earthen pot, and on the other the father sets the bamboo basket. In a hole dug on one side of the stool, after throwing in a few grains of wheat, a nut a copper and a little water, the mango post is planted, the cocoanuts are hung over the post, and the ground is smoothed. Then the father mother and child sit on stools, and the father worships the pot and the basket. Next, out of respect to the ancestors and as there are no images of them to instal, the father repeats the names of his own and of the priest's forefathers. When this is finished, the father gives the priest and eight other Brahmans a copper coin and a betel nut each.

Planet Worship.

After the marriage-gods are installed the goodwill of the planets has to be secured. The priest goes into the marriage booth, takes a copper plate, puts nine pounds of rice in it, and on the rice sets about seventy betelnuts. A servant brings a basket full of earth and the priest makes a flat raised square altar. The mother fetches fire from the house in a

tile, and the priest, rubbing a few grains of rice on her forehead and throwing some rice on the fire, spreads the hot cinders over the altar, purifies the firewood by sprinkling water over it, and then arranges it upon the fire. The priest worships the planets sitting on the low stool on which the mother sat. He goes into the house and bringing a pound of cooked rice, a leaf-cup with half a pound of butter, and 108 nineinch sticks, twelve of each of the nine pure plants and trees, sits with eight other Brahmans round the altar. The nine pure trees and plants of which the sticks or samidhas are made, are: Umbar Ficus glomerata, aghada Achyranthes aspera, rui swallow-wort, durva bent grass, darbha sacred grass, khair Mimosa catechu, palas Butea frondosa, pimpal Ficus religiosa, and shami Mimosa suma.] One of the Brahmans holds in his hands the leaf-cup with butter in it, another the grains of rice, the priest the sticks, and two more repeat passages from the Veds. After the priest has kindled the fire more texts are repeated, and butter, grains of rice, and sticks are thrown on the fire. While the eight Brahmans are busy repeating texts and feeding the flame, the priest goes into the house, and, bringing seventeen riceflour lamps, places them in pairs round the sacred fire and lights them. A married woman comes from the house, draws with white powder two squares in the marriage hall, and places in one square four low stools, three in a line and the fourth close by at right angles, and goes back into the house. The priest fetches from the house a round bamboo basket filled with cooked rice, and placing it in the other square, sprinkles it with curds and redpowder or goat's blood, and sets a lighted flour lamp and a lighted torch in the basket.

Evil Spirits.

The father mother and child again take their seats on the three Stools and the priest on the fourth. While the priest repeats texts the father lays in the basket two leaves and a nut and four copper coins. Then a servant, lifting the basket in both hands, waves it three times round the child's face, and taking it away without looking behind, is followed as far as the *marriage hall door by the child* and the parents; the father, as they walk, sprinkling water on the ground. On reaching the door the parents and the child wash their feet and again take their seats in front of the sacred fire. The servant, without looking behind, leaves the basket in a corner of the street, and taking the four copper coins returns and bathes. The child and the parents now stand, the father taking in his hand a leaf-cup with butter in it, a copper coin, two betel leaves and a nut, and walking once round the fire pours on it the contents on the sacred fire. Then the father holding out his open hands, the mother holding hers below his, and the child holding its

under the mother's, the priest pours three spoonfuls of water into each of their hands, and putting four nuts and a little more water into each, they all sip a little from their hands. Of the four nuts, three are eaten by the parents of the boy and the fourth by the boy when he starts for the bride's house on the wedding day. The father takes his seat, touches the brows of the eight Brahmans with sandal powder, and presents each with a silver coin. The priest touches the brows of the child and of the parents with redpowder and a few grains if rice, and taking a cocoanut plantain and two betel leaves and one betelnut presents them with a blessing to the father, who receives them in his shawl and passes them to his wife. A married woman waves a lighted lamp round the face of the child and the parents, and the father throws a few grains of rice over the sacred fires and with the mother and child goes into the house. Lastly the priest follows with the articles of worship and the day's religions rites are over. In the evening a dinner is given to the men friends of the house.

Gifts.

About eight in the evening of the same day the kinswomen of the boy's family start for the girl's house The details are: Sugar figures of men, animals, houses, temples, ships, fruit, flowers, and trees; twenty-one balls of pulse flour mixed with butter and sugar; about fifty cocoanuts; a miniature silver dinner and cooking set and another set of brass; English China and Indian glass ivory and wood toys; a set of miniature wooden articles of furniture; a chair and a pair of glass candle-shades; a looking glass; tumblers with oil and wicks ready to light; three robes and bodices; and wreaths of flowers; silver trays with a rosewater stand: a lighted lamp; a few grains of rice; sugar; and redpowder.] with music and about twenty metal trays filled with sweetmeats, toys, nick-nacks, clothes, house furniture, and cooking pots carried on the heads of servants. When they reach the girl's they stand on the threshold, and the girl's sister comes forward, and pouring water from an earthen jar or kara, and waving a lighted lamp before the face of the boy's sister, leads the way, and seats them on carpets in the women's hall, where the girl and the women of her family are assembled. The trays are laid down, and, after sprinkling a little water on the ground, a square is traced with white powdered quartz, and a chair set in the square facing the east. A few of the toys are spread before the chair, the candles and oil lamps are lighted, and the clothes are unfolded and laid ready for wearing. The boy's sister, followed by the girl and sprinkling water as she walks seats the girl on the chair. One of the women of the boy's family combs and braids the girl's hair and puts garlands of flowers on her head. She is dressed in a robe and bodice and a lighted lamp is waved round her face. After eating a little sugar she goes with a toy in her hand to show herself to her mother and other women. This is twice repeated and the third time she stays with her mother. Then cocoanuts are handed round, and the boy's sister is given about a, pound of sugar on a leaf-plate. The party make over the gifts to the girl's mother or some other elderly woman, and return to the boy's. The same evening or the evening after the girl's family sends a return present to the boy. Except that a book, a desk, a chair, glass candle-shades, chess, marbles, slippers, an umbrella, a silver tea set, and writing things are sent instead of cooking pots, and that the boy does not go to show himself to the people of the house, the practice is the same as in making presents to the girl.

Wedding Day.

The wedding day ceremonies come under eleven heads; gift-making, oil-pouring, shaving, bathing, feet-washing, fig-worship boy's procession, marriage, guest-worship, leave-taking, and return to the bridegroom's house.

Gift-making.

Early on the morning of the marriage day one of the women of the boy's family is sent to call near kinswomen. The women guests begin to arrive about ten, and sit chatting on a carpet spread in the women's hall. The women of the house fill three silver salvers with silver and brass cups, clothes, ornaments, and fruit. The details are: In the first salver a silver rosewater holder, silver cups with wet turmeric powder, wet sandal powder, redpowder, and powdered quartz, a silver lamp with five partitions; a lamp with five partitions containing redlead and red dark and yellow powder; twenty-five to thirty betelnuts and leaves and about a hundred cocoanuts. In the second salver, a high metal or wooden stool, a looking glass in a silver frame, an ivory comb, a silver cup for holding red and one for holding turmeric powder, a silver fiveinch stick, a bag worked in gold or silver holding five silver shells, a rupee, a gold necklace, a gold ring, a necklace of black beads, six glass bangles, a silk robe, a green cotton robe, a gold-bordered silk waistcloth, and a fine cotton robe. In the third salver, a bunch of five plantains, a cocoanut, two betelnuts and leaves, five almonds, five apricots, five dried dates, and a handful of wheat.] About one o'clock musicians, the women guests, the family priest, and the boy's married brother, with servants carrying the metal plates on their heads or shoulders start in procession for the girl's house. At the girl's house,

except the boy's sister, all the women go in. The boy's sister stands in the doorway, and one of the women of the girl's family comes out with a lighted lamp, and waving it round her face, loads her into the house. Except the family priest and the boy's married brother who wait on the veranda, the guests are all seated on carpets spread in the women's hall. Then in the marriage hall in front of the house steps, one of the women of the bride's family draws a square with white quartz powder, and sets four stools, two facing the east in one line, a third in front of the two, and a fourth beside the third for the priest. Between the stools are set a water-pot, a lighted lamp, and a metal plate with rice, and on the rice a betelnut. The boy's sister takes an earthen jar full of water, and, followed by the bride, walks from the house to the stools, sprinkling water as she walks. On the two stools, facing the east, sit the girl and her father, on the stool in front sits the boy's brother, and on the stool on the other sits side the boy's family priest. Helped by the priest the boy's brother worships Ganpati in the betelnut placed on the rice, and the water god Varun in the water-pot. He offers the second tray filled with clothes and ornaments to the bride. She touches the tray and the priest makes it over to some elderly woman, who, taking the bride into the inner part of the house, dresses her in the new clothes and bringing her back seats her, as before, next her father. Then the girl's father and the boy's brother tie five pieces of tamarind and betelnuts in the corner of their handkerchiefs and leave their seats. Another square is traced with lines of white powder and a low stool is set in it. The girl is seated on the stool; her hair is for the first time divided with a silver stick or bhangsal, combed, braided and decked with flowers; a green robe is folded round her waist; a gold chain is hung round her neck; a gold ring is put on one of her right fingers; silver rings are put on her toes; and she is led into the marriage hall, and her lap filled with fruit and spices taken from the third salver. A married woman of the family brings a lighted lamp, waves it round the faces of all present, gives the girl's brother a silk waistcloth, and withdraws. While this is going on in the marriage hall, two or three women of the boy's family go through the house with the first salver, and, wherever they find a married woman belonging to the girl's family, they sprinkle rosewater over her, rub wet turmeric powder on her hands, mark her brow with redpowder, and her throat with wet sandal powder, and giving her two betel leaves, a betelnut, and a cocoanut, again sprinkle water over her. After they have done this to almost all the women of the girl's family, cocoanuts are handed to all the women present, and the party form in procession and go home. About two or three in the afternoon, when the boy's people have left, the musicians meet at the girl's house, and her mother, dressed in a gold-embroidered robe and bodice and muffling herself in

a long shawl, with a crowd of female relations friends and servants carrying five large copper and brass pots full of pulse and flour, goes to the boy's house. [The details are: Five large pots with rice, split peas, split gram, wheat, and wheat and udid flour; their turned-up lids are full of balls of sesamum seed, grain, mug, and wheat flour. Besides these five pots are a cask of oil, a box of sugar, bamboo baskets full of fruit and vegetables, and a salver with the following silver articles, a raised stool, two dining leaves, five silver cups, five baskets, a plate with two small boxes, a betelnut-cutter, a lime-holder, a tree with packets of betel leaves hanging from its branches, a looking glass with richly carved frame, a comb, two cups one for turmeric the other for redpowder, a robe and a bodice. Another salver contains two silk waistcloths, a rich gold-worked robe and bodice, eight or ten other robes and bodices, and sweetmeats. At the house, a lighted lamp is waved round the daughter's face, and they all go in and seat themselves on carpets in the women's hall. At one end of the hall, one of the women of the bridegroom's family traces a square with lines of white quartz powder and within the square sets two low wooden stools. In front of the wooden stools is set a high silver stool, and on the stool five silver cups with five kinds of sweetmeats. Next to the silver stool two silver plantain leaf-plates are laid and sweetmeats served on them. When this is done the girl's sister, taking an earthen jar in her hand, seeks the boy, and, when she finds him, leads him to the women's hall, dropping water from the jar as she walks. He takes his seat on one of the two low stools, and soon after his mother, accompanied by some elderly married women, takes her seat on the second low stool, next her son, the elderly married women standing behind her. The girl's sister then comes to the boy and rubs turmeric powder on both his hands, and four married girls, two from each family, wave rice over him, and the girl's sister presents him with a silk gold-bordered waistcloth. The girl's mother comes forward, washes the feet of both the boy and his mother and dries them. She then presents the boy and his mother with costly clothes. They take the clothes into the house and put them on, and coining back seat themselves as before. The elderly women are then given robes and bodices, and a lighted lamp is waved round their faces. While this is going on the boy's sister or some other woman of his family, as she moves about, slips into the boy's hand a ball of wet turmeric powder. The boy and his mother are then asked to eat some of the sweets. As they are eating the girl's mother offers the boy a cup of milk, and he, on pretence of reaching his hand to the cup, thrusts the turmeric ball into her mouth, or rubs it over her face. She tries to avoid the rubbing, and the trick causes much amusement. When this is over the women are presented with cocoanuts, one from each house, and the

procession returns.

Oil-offering.

At about three in the afternoon eight married girls, four from each house, taking a metal plate with two betel leaves, one betelnut, a sweetmeat ball, redpowder, a little rice, a copper coin, a lighted lamp, and about a quarter of pound of cocoanut oil, go to Kalika's temple. Each waves rice and redpowder three times over the goddess, and the last girl lays the betel leaves and nut and the sweetmeat ball before her, waves the lighted lamp, pours oil into the lamp which is kept burning before the goddess, and withdraws.

Shaving.

When the women of the boy's family come back from making presents at the girl's house, a barber is called, a square is traced with lines of white powder, and a low stool is set in the square. On this stool the boy seats himself, and the barber shaves his head except the too-knot, and is paid eight pounds of rice, a rupee, a cocoanut, and betel. Then the boy is taken to a square traced in the marriage hall, where he is bathed and dried, and is led into the house with a lighted lamp waved in front of him.

Second Bath.

Shortly after returning from Kalikadevi's temple four married girls, each with an earthen pot, a metal plate with a lighted lamp in it, a box of redpowder, and a sugar ball carried before them, start for the house well. They worship the well, offer it sweetmeats, and draw water only partly filling their pots. On coming back to the marriage hall they again trace a square, set the four water-pots one at each corner, pass a thread round them, and placing two low stools together go into the house. In the women's hall another square is traced, two stools are set, and the boy and his mother are seated on the stool. Turmeric powder is rubbed over them, and they are brought into the marriage hall and seated on the stools in the square. A rupee is tied in the skirt of the boy's waistcloth, and while the musicians play the four girls sing and let water drop from mango leaves on the boy and his mother. When the bathing is over, the mother stands in her wet clothes and pours a little water on the feet of her nearest kinswomen, each of them in return dropping a silver coin into the water-pot. Then the girl's mother, waving a lighted lamp round her face, gives her a goldembroidered robe, which she takes and walking into the house puts

on. When the boy is done bathing he is given a fresh waistcloth, a lighted lamp is waved round his face, and red lines are drawn on his feet As he is putting on his new waistcloth his brother runs away with the old one, and puts it on keeping the rupee that was tied in its skirt. Next his maternal uncle throws a cotton sheet over the boy and lifting him sits with him on the threshold. Four elderly married women come with a shawl in their hands and a little rice, cumin seed, a rupee, a betelnut, and a winnowing fan, and stand holding the shawl over the boy and his uncle. They lay the rice and nuts on the fan, drop them into the shawl and then again taking them up put them back on the fan. This is done thrice by each of the women, and the rice, cumin seed, rupee, and betelnut are tied to the hems of the boy's and girl's clothes. After this is over his uncle takes the boy into the room where the marriage gods are worshipped, and dresses and adorns him. Except the shaving the ceremonies at the girl's house, after her mother has returned from taking gifts to the boy's house, are the same as at the boy's. Then the bride is taken to the room where the marriage gods are worshipped to be dressed and decked for the wedding.

Feet-washing.

About half-past four in the afternoon the girl's kinsmen, with music and flowers milk and jewels, go to the boy's house to wash his feet before he starts for the girl's. On reaching the boy's house they are received by the boy's father and his relations, and seated some in the marriage hall and others in the house. The father of the girl goes into the house, and, seating the boy on a high carpet-covered stool set in a white powder square worships him with the help of his family priest. He washes his feet with milk and wipes them with his handkerchief; he marks his brow with sandal powder, puts a gold ring on one of the fingers of his right hand, offers him sugar-cake to eat, sprinkles rosewater over him, and placing a nosegay in his hands, withdraws bowing. When this is over, the girl's father and the other quests are each given a cocoanut and a nosegay, sandal powder is rubbed on their brows, and rosewater is sprinkled over them. They are asked to stay and join the procession to the girl's house. Some of them stay, but the girl's father and others have to go back at once to their own house. Meanwhile at their home the girl and her mother are bathed and rubbed with perfumes, and the girl is decked in her yellow silk wedding dress and jewelry.

When the feet-washing is over, at both houses the family priest brings a branch of *umbar* Ficus glomerata, and places it on one side of the marriage hall. A boy who has married into the family is asked to cut the branch. The boy walks into the marriage hall with a shawl under his left arm and a sword in his right hand followed by his wife with a lighted lamp and by another woman. The woman ties together the skirts of the boy's and his wife's shawls. When this is done three more married women come into the marriage hall, and the one who tied the knot joining the other women three of them wave rice, and the fourth waves a lighted lamp over the branch. Then the four married women withdraw, and the son-in-law, with one stroke of his sword, cuts the branch in two. After his wife has waved a lighted lamp round his face he takes one of the two pieces of the branch, and walking into the house, followed by his wife, lays the branch and the sword near the marriage gods.

Procession.

After the girl's father has gone, the boy is rubbed with sandal and other fragrant spices and decked with jewels. His waistcloth is of silk, talc is sprinkled on his red turban, and three ornaments are tied to his brow, the wedding coronet or bashing, a plume or crest on the right side, and an aigrette of jewels in front. Next, he is clad in a long white robe hanging to his feet; his loins are girt with a sash, and another richly wrought sash is thrown across his shoulders; long wreaths of pearls or flowers fall over his chest and back down to his knees; on his feet are a pair of red gold-embroidered shoes with silk tassels, and a packet of betel leaves is given him to chew. His eyelids are blacked with antimony and a tinned cocoanut is put in his hand, and he thrice swallows a little curds placed on the palm of his right hand. With the family priest he goes to the household and marriage gods, and, bowing before them, offers them a cocoanut, and asks their blessing. Then, after bowing to the elders of the house, he is mounted on a richly dressed horse, and, besides the tinned cocoanut, holds a penknife [Among Prabhus the penknife has taken the place of the sword.] in his right hand. The order of the procession is: A bullock cart with a band of pipers and drummers; a row of carriages full of richly dressed children; buglers walking; a band of Muhammadan drummers; behind the drummers boys and men on foot; then dancing-girls walking in a line, and immediately behind them the boy-bridegroom on a horse with gold and silver trappings. On either side of the boy a couple of men wave fly-whisks or chavris, another couple fan him with silver fans, and a barber holds over him a long-handled big red silk umbrella. After the boy walks his mother and all the other women

quests except widows. On either side of and behind the boy and the women are carried wooden frames called *vadis* or gardens with pots of artificial trees fruits and flowers. [Each frame-work which is about six feet long and one broad is borne on the heads of two carriers. Two of them are carried on each side of the boy and one behind, the space in front being left open. Then comes a bullock cart with about a thousand cocoanuts, four bundles each of fifty sugarcanes, and one hundred round bamboo baskets strung on a rope. Besides the cocoanuts sugarcane and baskets, the cart contains four bunches of plantains, 100 copper or brass round baskets, forty pounds of almonds, dry dates, turmeric, betelnut, sugar, twenty pounds of cumin and coriander seed, forty pounds of fine rice, and about eighty pounds of dry cocoa-kernel. This closes the procession. Any women of the family who are too weak to walk follow the bullock cart in horse carriages. On the way, should two processions meet, the barbers lower the umbrellas and that they may not see each other's marriage coronet or bashing literally brow-horn, hold them in front of the bridegrooms' faces. At each turn in the street, to please evil spirits, cocoanuts are dashed on the ground and thrown away.

Wedding.

At the girl's house the party stops at the door of the marriage hall, where two female servants stand with an earthen water jug in their hands. The bridegroom stays on his horse and some of the men of the party enter the marriage hall and take the seats prepared for them, and the rest stand outside with the bridegroom. On the veranda the astrologer sets close together two silver water-pots filled with cold water, and in each floats a copper cup with a small hole in its bottom. In front of the water-pots surrounded by lighted brass lamps he places the marriage papers. The bride's maternal aunt, with a rice-flour lamp in her hand and a shawl held over her head at the four corners, going to the boy, who is still on horseback, waves the lamp round his face and gives him a little sugar to eat, and receiving a present of clothes from the boy's parents is led into the house under the shawl; then a young brother of the bride's or the son of some near relation is carried in like manner under a shawl to the bridegroom, and squeezing his right ear, receives a present of clothes, and is led back into the house. Next, the girl's father, dressed in a silk waistcloth, a shawl on his body, and a silk turban on his head, with a shawl held by the four corners over his head, lays a cocoanut near the forefeet of the bridegroom's horse, and walking round it offers the boy sugar, and lifting him from the saddle carries him to the altar in the centre of the hall. By this time the astrologer's copper cup fills with water and sinks

and the astrologer and the bride and bridegroom's family priests begin to chant hymns. The bride's mother, with a few of her nearest relations, bringing some presents, comes to receive The women of the bridegroom's family. When she comes to the bridegroom's mother she touches her feet, bows to her, and, holding her by the right hand, respectfully leads her into the house the others follow, and are seated on carpets in the women's hall. The remaining male guests either take a seat in the marriage hall or in the house, or stand till the bridegroom and the bride are married. The barber also remains standing in the marriage hall with the umbrella open. The girl's father and mother take their seats on low stools in front of the altar. The bridegroom standing on the altar takes off his long robe and turban and sits down with nothing on except his silk waistcloth.

Honey sipping.

Then the marriage service begins with its ten rites of honey-sipping feet-washing, rice-throwing, moment-naming, present-making clothesworship, bride-giving, oath-taking, seven-steps, and feedings.

When all are in their places, some honey and curds are laid in the bridegroom's right palm, and the priest repeats in Sanskrit, the bridegroom saying the words after him: 'I see and take thee my bride with the eyes and strength of the sun; I mix thee with honey and take away all that is hurtful in feeding on thee; I eat that sweet nourishing form of honey, and may I thus be of choice sweet well-nourished temper.' Touching the several parts of his body he says: 'May there be speech in my mouth, breath in my nostrils sight in my eyeballs, hearing in my ears, strength in my thighs and may my whole body and soul keep sound.'

Feet washing.

Then the bride's father washes the feet of his sons-in-law and their wives, and of the boy's married sisters, and a lighted lamp is waved round their faces. A little sugar is given them to eat and with the present of a silk waistcloth and robe they go back into the house. After this the bridegroom's feet are washed with milk and water and dried, and he is presented with a rick silk waistcloth with broad gold borders and jewelry.

Rice-throwing.

Then the bridegroom, putting on the new silk waistcloth and a silk

turban, is led by the bride's father into the house at one side of the women's hall. Here, with his face to the west, he is made to stand on a large heap of rice. The bride, clad in her richest robes and covered with jewels, is carried in by her maternal uncle and with her face to the east, is made to stand on a second rice heap facing the bridegroom. Between the bride and bridegroom, so that they cannot see one another, four men, if possible sons-in-law of the families, one of them with a drawn sword, hold a sheet of unbleached cloth with red lines drawn on it. Standing by the bride and bridegroom the family priests and the astrologer chant verses, at the end of each verse calling on the boy and girl to think how great a step they are taking. The girl's sister stands by with a lighted rice-flour lamp in a metal plate, and relations and others, clustering round the bride and bridegroom, at the end of each verse keep silently, throwing a few grains of rice over them. Now and then the father of the bridegroom, standing behind him with a long string of black glass beads with a gold button, The gold button should be one tola in weight, but at the time of taking it from the goldsmith it is not weighed; he is paid at the bazar rate at so much per tola of pure gold. asks him to look at the mystic figures on the sheet held between him and the bride and say over the names of the family gods. All this time the guests keep guiet and with the musicians wait for the lucky moment.

Moment-naming.

When the lucky time is come the priests cease chanting and the cloth is drawn to the north. A bugle sounds, and at the signal the musicians raise a blast of music, the guests clap their hands, the bridegroom's father puts the black bead necklace round the bride's neck, and the bride throws a garland of flowers round the bride-groom's neck. The astrologer touches the bride and bridegroom's eyelids with water, women wave lighted lamps round their faces, and they are seated on chairs face to face. The old women start their marriage songs, the dancing-girls dance, the barber shuts the umbrella, the parents and guests embrace or exchange greetings, and cocoanuts are handed to all present.

Present-making.

Then the bride and bridegroom receive money and jewelry from their friends and relations. Each present, as it is given, is noted down by the boy's and girl's brothers, who stand by with paper and pencil.

Clothes-worship.

Immediately after, near to where the astrologer set the water-pots, are placed the jewelry box and other articles intended as presents for the bride. [Bunches of plantains, metal baskets, almonds, dried dates, turmeric, betelnut, sugar, cumin, coriander seed, and rice.] As soon as all friends and relations have given their presents the astrologer leads the bride from the house and seats her on a low wooden stool between her own and the bridegroom's brother. After a little worship the bridegroom's brother gives her two robes, two bodices, a sash, and a jewelry box. After touching these and handing them to her mother, the bride takes her seat on the chair opposite her husband, and the ceremony closes by the two brothers embracing.

Bridge-giving.

An hour or so after the lucky moment, close to the bride and bridegroom's chairs, two low stools are set for the bride's father and mother, and in front a third for the priest. Between the stools are laid a cup, a ladle, and a plate, and close by another plate with fifty-one rupees. After the girl's parents and the priest have taken their seats, the girl's father sips water thrice and repeats the names of his twentyfour gods. Then he, his wife, and the priest leave their seats and go towards the bride and bridegroom's chairs. At the priest's request the bride and bridegroom stand facing each other. The boy holds out his open hands, the girl lays her's half open in his, he clasping her thumbs with his. Over their hands the girl's father holds his, open and slanting, and the mother pours cold water from a silver jug which running off her husband's hands passes through the hands of the bride and bridegroom, and, as it falls, is caught by the priest in a silver plate. While the mother pours, the priest says in Sanskrit: 'This is my daughter whom to this time I have nourished as a son, I now give her to your most sacred keeping, and solemnly pray you to centre in her your love as a husband and to treat her with kindness.' The priest then repeats the names of the bride and bridegroom, their fathers, grandfathers, great-grandfathers, and families. The girl's father dips fifty-one rupees in cold water and lays them in the bridegroom's open hands, and the ceremony closes by the priest giving to each old woman of the family three ladlefuls of the water that was poured over the bride and bridegroom's hands.

Oath-taking.

Next at one end of the marriage hall the family priest kindles a

sacrificial fire and sets the cocoa-kernel grindstone or *pata* before the fire with seven betelnuts on it, each betelnut lying on a little rice heap. Calling Indra, Varun, and Umamahesh to be present, the bride, the bridegroom, and the bride's father sit down, the bride's father saying:' You should treat her as duty bids you and not cheat her in religion, wealth, or pleasure.' The bridegroom thrice, repeats:' I will not deceive.'

Seven steps.

Then the bride and bridegroom leaving their seats walk thrice round the fire, and, on coming towards the grindstone, the bride groom sitting down and repeating a Sanskrit text. [The substance of the text is: May Vishnu make thee take one step for food one step for strength, one step for cattle, one step for happiness, one step for priests to perform sacrifices, one step for wealth, and one step for religion.] lifts the great toe of his wife's left foot and draws it over the seven rice heaps. This, which is called the seven steps or *saptapadi* or the crossing of seven hills, is the chief of all marriage rites. No marriage is complete until the bride has taken the seventh step. Till the seventh step is taken the father of the girl may break off the match and marry his daughter to some one else. The rite ends by a married woman striking the bride's and bridegroom's brows together.

Feeding.

After the marriage oath the bride and bridegroom feed one another, eating sweetmeats, vegetables, and rice from the same plate.

Guest-worship.

They are then dressed and seated near each other in the hall and again rise and go round among the guests marking their brows with redpowder.

Leave-taking.

At the same time the guests' brows are marked with sandal powder and each is given two cocoanuts. From the hall the bride and bridegroom are taken to the women's room and other places where the elder women are. Here each one, lifting the bride in her arms, kisses her, and with tears in her eyes speaks kindly to her and last of all the girl bids farewell to her parents. Meanwhile the party are getting ready to start for the bridegroom's house. The bride and

bridegroom are seated either on the same horse on which the bridegroom rode in the evening, or in an open carriage; they are followed by a company of friends and kinspeople in the same order as they went to the bride's house. [The order is the same as in the evening, except that a servant walks in front of the bride and bridegroom's horse, sprinkling cooked rice to satisfy evil spirit, and that link-boys surround the party, each carrying at the end of a stick a grated open iron bowl with lighted pieces of dried cocoa-kernel.] As they go fireworks are let off.

The girl's father and some of his nearest relations follow for a few steps and then return home.

Home-coming.

In some families when the procession reaches the door of the bridegroom's house two servants, the one taking the bride and the other the bridegroom on his shoulders, dance to the sound of music for about a quarter of an hour. Lines of white stone powder are drawn on the ground leading to the room where the marriage gods are worshipped and on both sides of the lines rows of lighted rice flour lamps are set. Between these the bride walks, her hands full of rice; the bridegroom follows bending over her, holding both her hands from behind, and with his thumbs from time to time forcing grains of rice out of them. As soon as the bridegroom comes near the house door his sister stops the way and does not let him pass till he promises her to give his daughter in marriage to her son. He then goes to the room where the marriage gods are worshipped, throwing the rice as before, and he and his wife are seated on low stools before the marriage gods.

Naming.

After performing some short rites the bridegroom's sister and parents tell him the bride's new name and this he whispers in her right ear. Meanwhile in the reception hall guests are seated and served with sugared milk and a handful of sugar folded in paper. This closes the wedding day ceremonies. The bride retires and sleeps with the other girls in the women's hall, and the bridegroom with the men.

Each of the four days after the wedding is marked by some special rites.

After the Wedding.

About nine or ten on the morning of the first day the bride is asked to serve food to the men of her husband's house. The five pots sent by the girl's parents are piled in the dining hall. In the highest is a gold necklace and in the four others are sweatmeats. Low stools and leafplates are laid out, and when the men are seated, the bride without letting the pots strike together uncovers them one after the other. She opens the first, and seeing a gold necklace, puts it round her neck; she opens the second and finding sweetmeats serves them to the guests uncovering each pot with great care and handing round its contents. She then takes a metal plate with a lighted lamp in it, and going to each guest waves the lamp round his face, each according to his means putting some silver in the plate. She then leaves the room and after the guests have eaten the sweet-meats they also leave.

Feeding.

In the afternoon the bride and bridegroom eat from the same leafplate, feeding one another in the presence of the women and children
of the house. When the meal is over small round betel-leaf parcels are
given to the boy and girl. The bride holds one end of the rolled leaf in
her teeth and the bride-groom bites off the other end. After this about
fifty betelnuts are equally divided between the bride and bridegroom.
A few girls side with the bride and some boys with the bridegroom,
and for an hour or two play games of odds and evens called *eki-beki*.
About four in the afternoon the bride and bridegroom are asked to
spend the night at the bride's house.

Visiting.

Before the bride leaves the women . of the bridegroom's family make her presents of jewelry. Then the bride and bridegroom go to the nearest relations of both houses, the women asking the bride what presents have been given her, and elderly widows who have not been at the wedding give her 2s. to £5 (Rs. 1-50) in cash, or they give a cocoanut both to her and her husband. This round of visits generally lasts till about seven in the evening when the bride and bridegroom go to the bride's house. Here they play a game of odds and evens, and about nine they feed one another sitting down to dine with the men.

Second Day After.

During the night the bridegroom steals his mother-in-law's bracelet, and early in the morning makes off to his father's house. When the bracelet is missed, the bride, her parents and friends, and the family

priest go in procession to search the bridegroom's house. On hearing they are come the bridegroom hides, and the bride and one of her party start over the house searching for him, shouting that he has stolen a water-jug and an old pair of shoes. At last his hiding place is found and he is led by his wife into the hall and seated on a raised carpeted stool in the midst of the guests. Before him on the carpet sits the bride and her father. The father, placing before him a silver water-pot, a silver plate, and a silver cup and ladle worships the bridegroom, and with joined hands asks him to give his feet to be washed. He refuses unless they promise to give him whatever he asks. They agree, and he asks something whimsical, a cart with a pair of goats, his father-in-law's garden, or his house, or asks his father-in-law to give up smoking or snuffing. When all he asks is promised he lets his feet be washed with milk and water. He is then given a suit of clothes and taken to the bride's house.

Third Day After.

On the third day, about ten at night, the bridegroom, the bride, and her parents and relations go with music to bring the bridegroom's parents and nearest relations to their house. On the way back they walk on cloths which are taken up as they pass and again laid in front. On entering the bride's house the guests are seated either in the receiving room or in the marriage hall. Before the altar lines are drawn and three low stools are set. The bride and bride-groom are seated on the altar, and the bride's parents and the priest on the low stools. The priest repeats texts and the bride's parents touch their eyelids with water. The bridegroom's married relations and their wives come in pairs. The husbands sit beside the bridegroom and the wives stand close by their husbands. Then the bride's mother pours water over the men's feet and the bride's father wipes them dry; and again the bride's father pours water over the women's feet and the mother wipes them dry. A married woman waves a lighted lamp round the faces of each pair, and then go back to their seats with a present of a silk waistcloth for that man and a robe and bodice for the woman. The feet of all the sons-in-law and their wives, and, last of all, the bride and bride-groom's feet are washed with the same ceremony.

When the feet-washing is over, in the marriage hall in front of the house steps a white powder square is traced, and, on one side facing the east, three low stools are set in a line and a fourth at right angles for the priest. In front of the three stools is placed a bamboo basket with five lighted rice-flour lamps, a sweetmeat ball, cooked rice, split peas, butter, vegetables, and cakes, a leaf-plate served with cooked

rice, vegetables, split peas, and butter, and a few sweet cakes. On the other side the bridegroom and his relations sit on carpets. The bride and her parents dressed in silk seat themselves on the three stools and the priest on the fourth. The bride's father gives light Brahmans round bamboo baskets, with, in each basket, a silver two-anna piece, a cocoanut, a betelnut, and two almonds. Then the bride's father, taking the girl in his arms, seats her on the lap of each of the bridegroom's kinsmen, who in return put a little sugar into her mouth. The mother takes the bride in her arms, and seats her on the lap of each of the bride-groom's kinswomen who, like the men, put a little sugar into her mouth, and last of all she is seated by her father beside her husband. Then the girl's mother making a twisted cloth ring puts it on the head of each of the bridegroom's kinsmen, and the father taking the square bamboo basket in both his hands touches with its bottom the twisted cloth ring. The bride's father then taking the ring in his hands places it on the head of all the women quests and the mother touches it with the bamboo basket. The fathers embrace, and the bride's father addressing the father of the bridegroom asks him to take care of their daughter whom they have nourished as their only fond child, whom they have always petted, and never allowed to leave her mother's side. Then the bridegroom's party taking the bride with them go back to his house.

Fourth Day. After.

About eleven on the morning of the fourth day, at the boy's house three squares are drawn, one in the women's room and two in the marriage hall one in the middle near the house steps and the other on one side. In the square drawn in the women's hall two low wooden stools are set in a line, and on them the bride and bridegroom are seated. The sister, or some other of the boy's kinswomen tightly ties his hair in a knot, and asks the bride to untie it with her left hand. The bride unties the knot, puts cocoanut milk on the bridegroom's hair, and rubs a mixture of turmeric and rice on his body. Then the bridegroom has to untie his wife's hair, to put on cocoanut milk, and rub her with a mixture of turmeric powder and rice flour. A married woman now goes to the marriage hall, sets a low stool in the corner square, and opposite to it the grinding stone. Between these she sets a metal plate with a mixture of lime and turmeric hiding in the mixture a gold finger ring, for which the boy and girl search and whoever finds keeps it; she also, at each corner of the square, sets a jar of cold water with a mango leaf floating in it and winds a thread round the jar. The bride and bridegroom are then led to the corner square in the marriage hall and seated face to face, the bridegroom on the low stool

and the bride on the grindstone. Each is given a packet of betel leaves to chew; and while they chew four married women sprinkle water on their heads and sing songs. The drums beat and the bride and bridegroom squirt betelnut and leaf juice on each other and from the metal plate throw red paint over each other. After this they are bathed, dried, and dressed, the bridegroom in his turban, long robe, silk waistcloth, and shoes, and the bride in a silk robe and bodice. The marriage ornaments are exchanged, the bridegroom's being tied on the head of the bride, and the bride's on the head of the bridegroom. A lighted lamp is waved round them, red lines are drawn on their feet, the silvered cocoanuts are exchanged, and the bridegroom raising his bride by the left hand follows his sister who walks before him sprinkling water from an earthen jar to where the third square is drawn in the middle of the marriage hall. Here, while the bridegroom and the bride are bathing, a bedstead with a large sugar-cake at each corner is brought in and the whole is covered with a sheet. In the middle of the bedstead is a grindstone muffled in cloth spotted with wet turmeric powder and at each corner an earthen jar. The bridegroom and bride are seated on the bed near the grindstone and each of four married women waves rice three times round their heads and touches their brows with the hems of the bride and bridegroom's clothes. Again, taking both the girl's hands in their own, each of the married women thrice waves a rupee, a piece of turmeric, and a few grains of cumin seed before the boy's face. Then taking the cumin seed, the turmeric, and the rupee from the hem of the bridegroom's robe they are waved before the bride. The bridegroom sits down and the bride rising takes the grindstone in her hands, and passes it to him saying: 'Take the baby, I am going to cook,' and again sits down. Then the bride-groom rising hands back the grindstone, saying: 'Take the baby I am going to office.' After this she leaves the child on the bedstead, and the bridegroom lifting his wife by the left hand leads her into the room where the marriage gods have been worshipped. Here he sits on a low stool before the gods, takes his wife on his lap, and, with a mango leaf, sprinkles the molasses and lime-water on the figure of the mango tree on the wall. Then, going into the women's hall where some married women are met, the bride and bridegroom feed one another. In the afternoon they are asked to go to the girl's house and start accompanied by the bridegroom's sister and music. Here in welcoming them a lighted lamp is waved round the faces of the three, and, except that the bedstead hangs from the roof and that before it is let down the bridegroom has to give the children of the bride's family 10s. to £1 10s, (Rs. 5- 15) the details are the same as at the bridegroom's house. When the baby-ceremony and the mango-tree worship are over, the boy is made to stand behind the girl, and each

married woman, dipping the girl's hands in a mixture of molasses and lime, rubs them on the boy's long robe. The mother of the girl draws red lines on a wall close by the marriage gods, and places a grindstone below the lines. In the middle of this she sets a brass hanging lighted lamp surrounded by sweetmeats and sweet cakes, and beyond them a row of lighted rice-flour lamps. The boy places five to fifteen rupees on the stone, and in presence of the women the bride and bridegroom feed one another.

In the evening the father and mother, and the bride and bride-groom, first at the bridegroom's and then at the bride's, sit in a line before the marriage gods, and worshipping them, throw a few grains of rice over them and over the floor of the marriage hall, and say: 'Depart ye gods and goddesses until such time as I may ask you to come again.' Last of all the priest, untying the six cigar-rolled mango leaves, sprinkles water over the heads of the four worshippers.

In the afternoon of the fourth day, comes the last of the marriage ceremonies, the rubbing of the bride and bridegroom with rice-flour at their own houses. The bridegroom is seated on a stool in the women's hall in a square of white powder, and some woman of the family rubs him with rice flour and takes him into the marriage hall, where he is seated on a low stool in a square of white powder, bathed with warm water, and has a lighted lamp waved round his face. He then goes into the house and is now free to go about as usual. After a few days the girl is presented with copper or brass miniature cooking and other house vessels filled with rice, pulse, flour, butter, and oil.

Parting Dinner.

Next day, or a day or two after when the host wishes the guests to go, a sweet dish of pulse is cooked and served at dinner time. After eating the pulse the marriage guests leave.

After the marriage ceremonies are over the boy and girl, on feast and high days, are asked to one another's houses, and at least during the first year at each visit receive clothes and other gifts. Before one of these visits the sight of a servant from the father-in-law's house often sets the bride crying. Coaxing threatening and whipping are all sometimes in vain, and the little wife from the time she leaves her father's house till she comes back keeps on sobbing. She is now a part of her husband's family. Her duty is entirely to her husband and his parents, who must support her through the wedded and if need be through the widowed state. To her husband's relations the young wife

shows much respect. She stands up when they pass near her, and in talking to them uses not their names but some term of respect. She does not call her husband by any name, and whether in public or private should never be seen talking to him. The husband is generally kind to his wife, he thinks her his friend and his equal, and leaves her the full use of his goods.

In the case of the girl, between marriage and pregnancy, come three minor rites, lucky-dress wearing, skirt-weaving, and puberty.

Lucky Dress.

Muhurt sada or lucky-dress wearing may take place at any time after a girl's marriage and before she is twelve years old. The boy's father consults an astrologer, who examines the boy's and girl's horoscopes, and names a lucky day and hour. A day or two before a servant is sent to tell the girl's mother when the robe is to be given. On the day fixed, two boys and the family priest, with fifty to a hundred cocoanuts, sugar cakes, and fruit, a robe, a bodice, and music are sent to the girl's house. On the floor of the women's hall a square is drawn with white powder, and two low stools are placed opposite each other, one for the elder of the boys and the other for the girl. The family priest sits beside them on a third stool. Then the elder boy worships Ganpati and performs the holy-day blessing, and touching the hem of the robe with red-powder, presents it along with the bodice to the girl. The girl rises, and going into an inner room winds the robe round her waist, and coming back seats herself as before facing the boy, who lays in her lap five plantains, an orange, a lemon, a guava, betelnut and leaves, a few grains of wheat, and a silver coin. A married woman waves a lighted lamp round the faces of the priest, the girl, and the elder boy, and the priest blesses the girl, drops a few grains of rice over the Ganpati, and taking a rupee from the boy retires. The elder boy goes home, and the younger, taking the girl with him in a carriage starts, with music, for the husband's house. At her mother-in-law's the girl stays for two days and then goes home.

Breast robe.

A few weeks after the lucky-dress wearing comes the *padar-sada* or breast-robs. The girl is taken to her father-in-law's house and for the first time wears her robe like a woman, drawing one end over her shoulders and letting it hang on the right side. In the afternoon of the second day, before leaving for her parents' home, the girl, seated on a low stool, has little children set opposite her, and her lap is filled with

fruit as on, the first day. She throws the fruit to the children, and after a scramble, some elderly woman of the house divides them between the children and the girl. The customs are the same as at the luckyrobe wearing except that the girl sits by the side of her husband instead of by the side of a boy of his family.

Coming of Age.

When a girl comes of age an elderly married woman fills her lap with rice, betelnut and leaves, and a cocoanut, and waving a lighted lamp round her face gives her sugar to eat. She is sent to her husband's house in a carriage, and her mother-in-law takes her and leaves her in a room by herself. Little girls are sent to ask kinswomen and friends.

An elderly woman goes to invite the girl's mother, and when she comes, about three in the afternoon, she changes her dress, and going to her daughter, combs and braids her hair, dresses her in a rich robe and bodice, and decking her with ornaments, seats her in a wooden frame leaning forward, her hands resting on her knees. On each side of the frame two large brass lamps and a pair of glass candle-shades are placed, and on the floor in front, a silver plate with boxes for betelnut and leaves, and spices, and close by a silver tree, its branches hung with packets of betel leaves. The music plays, and the guests, all of whom are women keep dropping in from five to eight, each as she comes having sweet cakes given her. When the guests are gone her mother leads the girl to the inner room, and taking off her ornaments makes them over to the mother-in-law, and after bathing and taking sugar cakes goes home. This is done every day for four days. About four on the morning of the fifth day, the mother of the girl, going to her daughter's house, bathes her, and then herself bathing, both the daughter and the mother are presented with robes and bodices. The mother then goes home. In the afternoon, on one side of the dining hall, a square of white quartz powder is drawn and in the square low stools are set. On these stools the girl and her husband are seated and their bodies are rubbed with rice-flour. Then in a square tracing, in the back part of the house, they are seated close to each other on low stools, and the boy loosens the knot of the girl's hair and the girl loosens his top-knot and they are bathed. Then, on a square traced on one side of the women's hall, three low stools are placed, two in a line, and the third at right angles. The boy and the girl seated on the two stools and the priest on the third, worship Ganpati, perform the holy-day blessing, worship the Matriks that is the seven goddesses Gauri, Padma, Shachi, Medha, Savitri, Vijaya, and Jaya, and perform the joyful-event spirit-worship. The boy and girl leave their seats, and the priest, helped by ten other Brahmans, kindles the

sacred fire in honour of the nine planets and of Bhuvaneshvar, the god of the universe. When this is over the boy and girl sit as before, cooked rice is waved round them, and is laid by the roadside to please evil spirits. After washing their feet, they are given new clothes and have their bodies rubbed with sweet-scented powder, and seating them close to each other in a square tracing in the back part of the house, the priest pours over their heads water from a rice-washing metal-pot or *viroli*, and after bathing and dressing in new clothes they take their seats as before in the women's hall. An earthen altar is made, Ganpati is worshipped, and the sacred fire is lit. The boy touches the hem of a new robe which he gives to the girl and fills her lap with presents. A married woman hands the boy a small quantity of bent or durva grass, pounded wetted and tied in a piece of white cotton, and standing behind the girl and laying her head between his knees, he lifts her chin with his left hand and with his right squeezes into her right nostril a few drops of the juice of the bent grass. A lighted lamp is waved round their faces and the ceremony is at an end. In the evening the girl is seated in the frame richly dressed and decked with jewels. The mother and other kinswomen, and friends with music and trays of clothes and jewelry, go to the boy's house and take their seats on carpets spread in the women's hall. A square is traced near the frame, and on one of two low stools placed near each other, the boy sits, and the girl coming out of the frame sits on his right. The girl's mother goes to them, and waving a lighted lamp round their faces puts a shawl over the boy's shoulders and a rich suit of clothes and jewelry in the girl's hands. The other women follow giving presents according to their husband's means; sugar cakes and cocoanuts are handed, and, except the mother and her sister, the guests leave. [In handing sugar cakes and cocoanuts a married woman with a tray full of sugar cakes goes to each woman guest and, sitting in front of her, asks from whose house she has come. The quest says from her parents or mother-in-law's as the case may be. The hostess takes in her hand two sugar cakes and goes on giving them two at a time till the guest stops her and will have no more. Some women take ten or twenty or even as many as fifty or 100 pairs of sugar cakes and afterwards sell them and buy ornaments with the money. in some houses women who are known to do this are watched and given just as many cakes as there are people in their houses. Lately, except among the rich, cakes are less freely given, each guest getting only two.] About nine at night the boy is seated in the frame and the girl rubs him with sweet-scented powder, and gives, him a cup of milk to drink. He drops a silver coin into the cup and drinks the milk, and kissing his wife lifts her in his arms, and carries her in to the nuptial room which is adorned with garlands of sweet-scented flowers.

All this time the mothers and other relations, both male and female, surround the pair. The boy's mother sobs, 'We have brought you so far and now make you over to the toils of married life.'

Pregnancy.

In the fifth month of a woman's pregnancy a few families perform a ceremony called the *panchangne* or fifth month. [Very few families perform this ceremony. Ganpati is worshipped, sugar cakes distributed, and in the evening both the boy and the girl are presented with clothes. In the seventh or eighth month of a woman's pregnancy the priest is called to fix a day for the pregnancy ceremony. On the morning of the day little girls go to ask kinswomen and friends, and an elderly woman goes to invite the girl's mother. In the afternoon the husband and wife are seated on two low stools, and the priest on a third. After a sacred fire is kindled, Ganpati is worshipped, holydayblessings performed and the planets worshipped, the boy squeezes a few drops of bent grass juice into the girl's right nostril, throws a garland of fig-tree leaves round her neck, and sticks a porcupine guill into her hair. He next gives her a ladleful of curds mixed with two grains of pulse and one of barley, and asks her thrice what she is sipping. She each time says in reply, 'That by which women are blessed with children.' When this is over some elderly married woman waves a lighted lamp round their faces. In the evening the girl's mother and other women go to the girl's house, and, seating the boy and the girl in a square traced on the floor, give them shawls, clothes, and jewelry, and taking some sugar cakes, go home. A dinner is given by the boy's household to both men and women relations. Other dinners at relations and friends' houses follow, the young wife receives presents, and in every way meets with the greatest care and kindness. In the eighth or ninth month of her first pregnancy the young wife, who is often not more than fourteen, is seated in a palanguin and sent with music to her father's house. As she goes, at every corner of the street, to please evil spirits, cocoanuts are dashed on the ground and thrown away.

Birth.

From the time the girl goes to her father's house she is fed daintily and decked with flowers. A midwife, generally one known, to the mother's family, attends the girl, and when the girl's time comes is called in. The young wife is taken to a warm room and one or two of the older women of the family gather round her. Outside of the room the girl's father or some other of the older men of the house stands

with a watch in one hand and with the other tells his beads, promising much to the gods and goddesses if they will grant the girl a safe delivery. Care is taken that the birth may happen at a lucky moment, and should the mother suffer severely, Brahmans are hired to read sacred books or to tell beads both in their houses and temples. As soon as the child is born the girl's father or some one of the older men of the house notes the time, and a metal dinner plate is beaten as a sign of joy, the women rejoicing over the mother as one brought back from death. Till the mother is washed and laid on a cot, the babe is put in a bamboo winnowing fan. It is then washed in warm water, its navel-cord cut, its head squeezed to give it a proper shape, its nose pulled to make it straight, and the cartilage of its ears bent. It is bound in swaddling clothes and laid beside it's mother on the bed, and a bit of karvi Strobilanthus grahamianus, and a penknife are laid under the pillow to ward off evil spirits. Word is sent to the husband's family, sugar is handed, and the midwife is given four to ten shillings, rice, betel, a cocoanut, and a robe. The room-door is covered with a blanket, and an iron bar is thrust across it. A dim-shining brass lamp burns near the child's face. The mother is given a packet of betel leaves, myrrh or bol, a mixture of honey and butter, sagargota, that is the fruit of the Guilandina bonducella and butter, myrrh mixed with molasses, and myrobalan powder mixed with molasses. For forty days she drinks nothing at water in which a red-hot iron has been cooled, boiled with cloves. For three days she eats a coarse wheat-flour paste mixed with molasses and butter. On the eleventh day she has wheat cakes boiled in butter, and, from the twelfth to the fortieth, rice mixed with black pepper and butter. After the fortieth day she takes her usual food, rice, vegetables, or fish, as suits her best. For forty days she does not leave her bedroom without a hood, a thick blanket thrown over her body, and slippers. Every evening the babe is rubbed with parched gram powder and the white of an egg, and bathed in hot water. Before drying the child, the midwife takes water in a metal pot, and waving it thrice round, that the child's misfortunes may be on her and no evil eye may look at it, stands up, pours water over her feet, and touches the child's brow with dust, Then she marks the child's brow and cheeks with soot, and taking a few grains of mustard seed waves them round the child and throws them into the fire. For the first three days, the child is fed by sucking a cloth soaked in coriander juice. For ten days after the birth both the wife's and husband's houses are unclean, and there is no worship and no prayers. That evil spirits may not choose this time to enter the house, a Brahman, every evening, holding in his hand a pinch of ashes, repeats charms and spells, and gives the ashes to some one in the house to rab on the child's brow and lay under its pillow. With the same object the midwife

draws ash-lines at the house-door and at the door of the mother's room. Any one coming into the house must, as he enters, look round and drive off any spirit that may be following him, and wash his feet and hands. If he is not a member of the family he must bring some sugar cakes or clothes. It is unmannerly to go to a new-born babe empty-handed.

First Day.

On the evening of the day of birth, or on the next day, the father of the child, the astrologer, the family priest, and kinspeople and friends go with music to the mother's house. They are met by the mother's parents and seated, the men guests in the hall and the women guests in the women's room. The astrologer is handed a slate and pencil and paper pen and ink. He takes from the wife's father a note of the time of birth and sits in the midst of the company calculating. When the horoscope is ready he reads it aloud, almost always foretelling for the child talent, comfort, success, and long life. Then touching the brow of the oldest man in the father's family, he makes over the horoscope to him with a blessing. While this is going on, in the inner part of the house, the father of the child, sitting on a low stool in a square traced on the ground, worships Ganpati and performs the holy-day blessing. He rubs a little gold and honey on a stone, takes it in a silver cup, and going into the lying-in room, dips a gold finger ring into the cup, and in presence of some kinspeople lets a drop fall into the child's mouth. If the birth hour be unlucky the father has to undergo penances; and he does not see the child's face for fear he should loose his own or the child's life. When the lucky hour comes, he worships Ganpati and performs the holy-day blessing, kindles a sacred fire, and placing the child on a piece of red cloth in a winnowing fan, lays him before the face of a cow, and lets honey drop into his month. In honour of the birth a feast is given by the mother's father. Dancing-girls amuse the guests, milk, cocoanuts, and sweet cakes are handed round, the astrologer the priest and other Brahmans are paid, and the guests leave.

The third day After the birth the child and the mother are bathed, and the mother first suckles the child. [The practice of not suckling a child till the third day is dying out.] In the mother's room two. long lines of white powder are drawn and divided, if the child is a boy into eleven and if a girl into ten spaces. In each space is placed a betel leaf touched on the top with soot redpowder and turmeric, boiled gram, cooked horse-radish leaves, and cocoanut scrapings mixed with molasses. Close by a square is traced on the ground and a low stool is

set in the square. In front of the stool are laid a metal plate with a lighted lamp, redpowder, a few grains of rice, a sugar cake, a cocoanut, and close by a full water-pot and ladle The mother is seated on the low stool, her hair is combed, and the child is laid in her arms.

Then the brows of both the child and the mother are touched with redpowder and a few grains of rice Bits of sugar cake are put into their mouths, a cocoanut is laid in the mother's hand, and a lighted lamp is waved round their faces. Then placing the cocoanut on the ground, the mother silently raises the ladle from the water-pot, and taking a little water sprinkles it on the child's body, and throws a few grains of rice on the leaves. The guests, who are little boys and girls, are sent home after *eating* boiled gram and cocoanut scrapings.

Fifth Night.

The fifth night is a time of much danger to the child. Sathi, the goddess of that night, is worshipped by some elderly married woman of the family with presents of fruit and is besought to take care of the babe. [In some families, along with the fruit, fried pulse, grain, a cock, and a tumbler of liquor are offered. All these are given to the midwife.] A blank sheet of paper with pen and ink is laid near the goddess that she may write the child's fate, and a drawn sword is left leaning against the wall. The father of the child, with some relations and friends, goes to his wife's house with presents. He worships Ganpati, gives the midwife two to ten shillings in cash, and receiving sugar cakes returns home. The present consists of butter, sugar, betelnut and leaves, rice, cocoanuts, five suits of embroidered and plain clothes, an umbrella, a pair of English shoes, stockings, gold silver and pearl ornaments, wood and metal boxes for holding cloves, cinnamon, nutmeg, mace, and other articles. That no evil spirit may steal in watchmen are set to guard the house and outside, till daybreak, servants sing by turns, and, according to the father's means, are paid two to ten shillings. The midwife is seated near the child, and that she may not sleep is closely watched by the elder women of the house.

Tenth Day.

On the tenth day the mother and child are bathed, and their clothes washed, the whole house is cleaned, the floors are smeared with a mixture of cowdung and water, and cow's urine is sprinked all over the house. After bathing and dressing in fresh clothes, to free them from impurity, each member of the household thrice drinks about a teaspoonful of the five cow gifts. [The five cow-gifts are clarified butter, curds, milk, cowdung and cow's urine.] Then the men of the

father's family change their sacred threads and drink the five cowgifts.

Infancy.

Under the head Infancy come eight rites, naming, thirtieth day, fortieth day, ear-boring, vaccination, teething, hair-cutting, and birthday.

Naming.

On the tenth, eleventh, or twelfth day, but sometimes not till the hundred and first day after birth, the child is named. About four in the evening the women of the father's house go to the child with presents of clothes, and putting a large sugar-cake on each of the four corners of the cradle, lay the child in the cradle, and swing it, calling the child by a name chosen in its father's house. The mother's relations give the child another name; but a child is generally known by the name chosen for it by the father's family.

Thirtieth Day.

'On any day between the twelfth and the thirtieth a servant brings into the house a copper pot full of cold water, and placing it in a square traced on the floor of the women's hall, the mother, who is seated on a low stool in another square, worships the water-pot. When the worship is over, she takes in her hand a piece of white cloth, and putting a little turmeric powder in it, is asked by an elderly married woman, who, at the same time waves a lighted lamp before her face, where she is going with the cloth. The mother answers:' To the well to wash my child's clothes.'

Fortieth Day.

On the fortieth day the mother is bathed, a necklace of new beads is tied round her neck, and new glass bracelets are put on her wrists. The bracelet-seller is given two shillings, eight pounds of rice, a cocoanut, and betelnut and leaves, and bowing low retires, praying that the woman may never be a widow and may be blessed with eight sons. The young mother is again pure, and her relations and friends come bringing presents of clothes and sugar cakes. With this ceremony the days of confinement end.

Two to five months after, on a lucky day, a boy, seated in a palanquin,

is sent with music, from the husband to the mother with clothes, small silver pots, and gold and silver ornaments, toys, and about a hundred cocoanuts and sugar cakes. At the house the boy is seated on a stool, and the mother and babe are dressed in new clothes and go to the father's house. On the way, to please evil spirits, at each turn of the street a cocoanut is broken, and on reaching the father's house the child's aunt or other kinswoman, lifting the child in her arms, stands with it on the veranda, and another woman waves a pot full of cold water round the child's head, throws the water away, and takes the child into the house, followed by the mother.

Ear-boring.

When the child is between six and twelve months old comes the earboring or kanvindane. A girl's ear is bored in three places, in one part of the lobe and in two places in the upper cartilage. About a year after the ears are healed her nose is bored. The hole is generally made in the right nostril. But if the child is the subject of a vow, the left instead of the right nostril is bored, the nose-ring is worn in the left nostril, and the child is called by such names as, stone or Dhondibai, beggar or *Bhikubai*, sweepings or *Govarabai*. In such cases after marriage the mother-in-law bores the left nostril, and at the husband's expense puts in a rich new nose-ring. In a boy the lobe of both ears and sometimes the upper cartilage of the right ear are bored. If a woman, who has lost one or more sons, has another, that he may be thought to be a girl, she bores his right nostril, and puts a nose-ring into it sometimes giving him a silver anklet to wear, and calls him stone or Dhondu, or beggar Bhiku or Fakir. [These nose-rings and anklets are worn till the thread-girding time. They are then taken off and given in charity.] In boring the ears and nose the hole is made with a needle and black cotton thread tied like a little ring. The wound is fomented with boiled cocoanut oil and the child is dieted to guard against inflammation. When the wound is healed a gold ring is passed through each of the holes and afterwards a heavier ring is worn circled with pearls and precious stones. As a rule two holes are first made, and when the place is healed a third hole is bored. The borer, who is generally a goldsmith, is paid 3d. to 6d. (2-4 as.) a. hole. For the first, boring he is given a rupee, about eight pounds of rice, a cocoanut, and betelnut and leaves.

Vaccination.

When the child is five or six months old, some vaccinator who known to the family is sent for, and operates in three places on the right arm

and in two on the left. [Brahman vaccinators are most popular. They are paid 2s. to 4s. In some families children are not vaccinated, the parents waiting till they are attacked by the small-pox. Then ceremonies like the above are performed, and in addition, Hindu male or female devil-dancers are called in. On the third day he again calls and examines the wounds. If the lymph has taken, the goddess Shitaladevi is supposed to have entered the child, who is sacred treated with respect and spoken to as devi, that is the goddess. A silver pot filled with cold water is set in some clean spot, English Chinese and Indian toys are laid round it, and at night the place is lighted. The mother dresses in white and does not wear the usual mark on her brow. Morning and evening she waves buring frankincense and a lighted lamp round the child's face, the swinging cot, and the water-pot, and bows before them. She touches nothing impure. Neither the men nor the women of the family eat fish or flesh, and go to no marriages, funerals, dinner parties, or processions. The husband sleeps apart from his wife, and none of the woman of the family, who may be ceremonially impure, walk about the house, or talk loud. Morning, noon, and dusk, the women seated on swinging cots, sing songs in praise of the small-pox goddess, and the whole care of the household is centered in the child. If a stranger comes into the house, he has to sprinkle cow's urine on his feet with a lime-tree twig, and speak to the child kindly and reverently as though addressing the goddess. On the mourning of the seventh day after the lymph took, a girl is sent round to ask female relations and friends, and a written invitation is sent to men to be present at the ashrubbing or vibhut. About ten in the morning, in front of the water-pot, a square is traced with powdered quartz, and in it figures of men, animals, houses, and fruit-laden trees are drawn. In the square a low stool is placed and in front of the stool two silver plates are laid, one with scented powder or abir, the other with cowdung-ashes or vibhut. Lighted metal and glass lamps and burning frankincense-sticks are mounted on brass and silver stands. From four in the afternoon women begin to come, bringing trays of sweetmeats, flowers, and fruit. The mother, dressed in a rich suit of white, comes with her child in her arms, and seating it on the low stool, humbly, as if addressing the goddess, asks it to accept the offerings. Then rubbing the ashes and the scented powder on the sores, she again begs the child to accept the sweetmeats, fruit, and other offerings. Then the salvers are emptied, a little of each article being left in each salver, sugar-cakes are handed, and the women go home. About eight in the evening men begin to drop in, and after fruit and a cup or two of spiced milk served in English dishes and on tables, sugar-cakes are handed and they leave. A fortnight after the vaccination day, the nearest relations are

called, and at noon, with music playing, the child and its parents relations and friends go to the temple of the goddess Shitaladevi. Hero the mother pouring pot after pot of cold water upon the image's head, sits with her husband and child before the image, the priest murmurs verses, and the mother throws rice, flowers, and redpowder on the goddess and bows low. They then fill the laps of married women and giving them pieces of watermelons go back to the child's house. Here they are served with a rich dinner, with a dish of spiced milk, and leave after throwing water from the water-pot into a well. In the evening a rich dinner is given to the men. After this, lest other children should be attacked with small-pox, no songs are sung in praise of the goddess.

Teething.

When a child begins to cut its first tooth, it is dressed in trousers cap and shoes, and loaded with ornaments, and, accompanied by servants, is sent to the houses of relations, with either silver or brass cups and sweetmeats. At each house the servant puts a little sugared gram into a cup, goes in, and lays it before a married woman. Then the women gather round the child, smiling, and touching its cheeks. In this way the child goes from house to house till about seven or eight at night it is taken home. Only the well-to-do keep this custom.

Hair-cutting.

For the hair-cutting the boy is made to sit either on his father's lap or on a low wooden stool, a new handkerchief is spread over his knees, and sometimes a silver water-cup is set beside him. The barber shaves the boy's head, leaving two tufts of hair, a top-knot and a forelock. When the shaving is over, the women of the family, as the barber's perquisite, let sugar-balls roll down the boy's head into the handkerchief, and the barber is given one rupee, eight pounds of rice, a cocoanut, betelnut and leaves, the handkerchief, and the silver cup. The forelock is from time to time cut and kept short and the top-knot is allowed to grow into a long lock or *shendi*.

In well-to-do families on their birthdays, boys are generally given a new suit of clothes and ornaments relations and friends are treated to a cup of spiced milk, and singing and dancing go on the whole night. The birthday is kept sometimes till the child is girt with the sacred thread, sometimes till he is married, and sometimes till he is a father.

Thread-girding.

A boy's *munj* or thread-girding may take place at any time between four and ten. The parents ask the astrologer who sees the boy's horoscope, calculates, and fixes the day. On some lucky day about a week before the ceremony, a quarter of a pound of turmeric, of redpowder, of coriander seed, of molasses, and of thread are brought from the market and laid before the family gods. Two or three days after, from the house of the boy's father, a party of boys and girls with music go to ask the people of their caste to the ceremony. A booth or porch is built in front of the house, and the chief women of the family go to ask their kinswomen both for the thread-girding and for the dinner, begging the mother of one of the sons-in-law to send her son for the gourd-cutting. On the same day the head of the family asks men relations and friends by letter. Next day the boy is rubbed with turmeric and the same rites are gone through as before a marriage.

About three in the afternoon, such of the guests as are married women are served with a rich dinner. A the head of the row of guests sit the boy and his mother in a square space traced with white powder on the threshold of the room. Before they begin to eat, a morsel from the plate of each quest is set before the boy and his mother and tasted. The mother is then served on a separate plate close by the boy. In the back yard of the house an altar is built, the same as the marriage altar except that it is measured by the boy's and not by the girl's arm. The same night male guests are entertained at dinner, musicians come, and a store of earthen pots is laid in. Early in the morning of the thread-girding day lines are drawn in the booth and two low stools are set within the lines. The boy and his mother sit on the stools and with songs and music are bathed by a band of young married girls After they are bathed lighted lamps are waved round them and they go into the house. On one side of the entrance hall lines are drawn and the boy is seated on a low stool. The boy's mother's brother and his father's sister come to him. The mother's brother puts a gold ring on the boy's right little finger and with a pair of silver scissors cuts some hair off his forelock, and the aunt catches the hair in a silver cup filled with milk. The barber sits in front of the boy and shaves his head except his top-knot. When the shaving is over, the women of the family roll sugar-balls and silver coins down the boy's head into a handkerchief spread over his knees. These are given to the barber, and also a new turban or a handkerchief, rice, betel and a cocoanut. The boy is a second time bathed in the booth, rubbed dry, and a lighted lamp is waved round his face. Then his maternal uncle, covering him with a white sheet, carries him in his arms to the veranda. Here again a lighted lamp is waved round his

face and he is carried into the room where the goddesses have been worshipped. After a short time the boy eats from the same plate as his mother along with eight boys who wear the sacred thread but are not married. When the meal is over, presents are made to the eight companions, and the boy is washed and taken to the room where the goddesses have been worshipped, decked with ornaments, and led to the altar on one side of which his father sits with his face to the east. The guests begin to come and either sit in the hall or stand near the altar. The boy stands opposite his father on a heap of about eight pounds of rice facing him. An unbleached cloth marked with red lines is held between them, and, till the lucky moment comes, the astrologer, the family priest, and other Brahmans repeat texts. The boy's sister stands by with a lighted rice-flour lamp in a metal plate, and relations and others gather round the boy, and at the end of each verse keep silently throwing a few grains of rice over him. At the lucky moment the priest stops chanting and the cloth is pulled to the north, a bugle sounds, and at the signal musicians raise a blast of music and the guests clap their hands. A piece of silk cloth fastened to his waistband is passed between the boy's thighs and tucked into the waistband behind, the sacred thread is put over his left shoulder so as to fall on the right side, and a string of *munj* grass Saccharum munja, together with a piece of deer hide is bound round his middle. The boy is now ready to hear the Gayatri mantra or holy text. He bows to his father, is seated on his father's right knee, and, in an undertone, the words of the hymn are whispered in his right ear. Lest the words should be overheard by a woman or by a man of low caste, a shawl is thrown over the father's head and the guests talk together loudly or repeat a hymn in praise of the gods. After this kinspeople and friends present the boy with gold, pearl, or diamond rings, or money. The family priest takes away the rice heap and kindles the sacred fire in the middle of the altar. The observance ought to last five days, the sacred fire being kept alight and the boy touching no one. But as few families can afford to spend five idle days, the fire is usually put out on the evening of the first day. In the afternoon the mother of the boy, with a number of kinswomen and friends, goes with music to her parents' house. She receives clothes and other presents, and leaves after sugar-cakes and cocoanuts have been handed round. The presents are: Silver or brass plates, ladles, cups, looking glasses, silver brow-marks, cups for sandal powder, a gold or cotton sacred thread, a low wooden stool, a silk waistcloth, and a rupee in cash, the whole worth 8s. to £5.] On the mother's return comes the begging ceremony. The boy stands near the altar with a beggar's wallet round his shoulder and a staff in his hand, and begs, and each man and woman gives him a sugar-ball and a silver or copper coin. After this

the kinsmen and kinswomen are served separately with a rich dinner. About eight or nine at night the boy starts on a pilgrimage nominally to Benares, but in practice to his mother's father's house. When he is gone the guests sit in the receiving hall, and about ten form a procession and with music follow the boy to his grandfather's.

On their arrival the boy is seated on a high carpeted stool, and his maternal uncle dresses him in a rich suit of clothes. Sugar-cakes and cocoanuts are served and the party returns with the boy to his father's. Then the guests take their leave after a parting cup or two of spiced milk and some betelnut and sugar. At night the guardian deities of the thread-girding are bowed out, and the next day the boy is rubbed with rice flour and goes back to his every-day duties. A day or two after the guests have gone special sweet dishes are cooked and five to a hundred Brahmans are fed. While taking their dinner the Brahmans by turn repeat hymns, joining in a chorus at the end of each hymn. When dinner is over, betelnut and leaves are served, and, except the family priest and one or two learned Brahmans who are paid one to two shillings, each is given $1\frac{1}{2}$ d, to 3d. (1-2 as.) After distributing these gifts the host stands with his turban on his head and his shawl in his open hands before the seated Brahmans, who repeat the usual blessing for the gain of money, corn, cattle, children, and long life, and at the end throw grains of rice over the host's head and into the shawl held in his hands.

Death.

A few hours before death the family priest brings in a cow with her calf, marks the cow's forehead with red and salutes it by bowing and raising his joined hands. The eldest son or other near kinsman of the dying man pours into the dying mouth a ladleful of water in which the end of the cow's tail is dipped. The priest is given 10s. to £1 10s. (Rs. 5-15) as the price of the cow, and a learned Brahman is called to read the sacred books or Gita. [No cow is given in the case of children.] In the name of the dying man rice pulse and money are given to Brahmans and other beggars, and a Spot in the women's hall is strewn with sacred grass and sweet basil leaves. On the grass and leaves the dying is laid the feet towards the outer door, and a few drops of Ganges water, a leaf of sweet basil, and a particle of gold are put in the mouth. The name of the god Ram is called aloud in the dying man's right ear and he is asked to repeat it. The eldest son sits on the ground and taking the dying man's head on his knee, comforts him till he draws his last breath, promising to care for the widow and children. The body is covered with a sheet, and the women sit round weeping

and wailing. The men go out and sit bareheaded on the veranda, and servants start to tell relations of the death. About £2 is handed to friends, who go to the market and bring what is wanted for the funeral. [Things wanted for a funeral are always brought from the market; they are never taken from the house. The details are: For a woman's funeral, two bamboo poles, two split bamboos, 20 yards of fine cotton cloth, coir rope, date matting, basil leaves, a flower wreath, 1 large and 5 small earthen pots, sandalwood, 1200 cowdung cakes, clarified butter, six large wooden posts, 1 to 1½ khandis of wood, dry palm leaves, tobacco and country cigars, parched grain, a cocoanut, matches, two copper coins, one winnowing fan, a dish and a copper pot, wheat flour, pounded turmeric, red and scented powder, camphor, plantain leaf, white clay, dried clay, myrabolans, sesamum, rice, betelnut and tobacco, lime, five plantains, one cocoanut, a small looking glass, a comb, a small wooden box, bangles, wheat, and betel.

For a man the details are the same as for a woman, except that plantains and other fruits are not wanted, and that about ten yards less of cloth is used in the shroud If a child's body is burned, its funeral costs about Rs. 3-5-0. Of this 4 annas go in cloth, ¼ anna in cowdung cakes, 1 anna for a clay pot, and about Rs. 3 in firewood. To bury a child coats about Rs. 1½, Rs. 1¼ for digging the grave and 4 annas for salt.]

When they come back, they busy themselves in making the body ready. Outside of the house the chief mourner and his brother, if he has brothers, are bathed one after the other, and their mustaches and except the top-knots their heads are shaved and their nails pared. The chief mourner is dressed in a new waistcloth, and a shouldercloth is twined with his sacred thread. Near the feet of the body rice is cooked, made into balls, and laid at its feet, and then taken and placed on the bier near the head. [The bier is made of two solid bamboos in the shape of a ladder, strongly bound with a coir string. On the ladder is laid a piece of date matting covered with a white sheet. The nearest male relations followed by the women carry the body through the main door and lay it on the house steps on a small plank, the head resting on the steps. Round the head the women sit weeping, the men standing at some distance. A second rice ball is laid near the feet and the third is placed on the bier. A pot of cold water is brought from the well and poured over the body, which is hidden while it is being dressed. Elderly women dress a woman's body in a full suit of new every-day clothes. [A widow's body is dressed in a white robe, her brow is rubbed with white powder, and the body is laid on the bier covered with the winding sheet. A married woman's body is not

covered with a winding sheet. A man's body is covered, except the face.] If the dead woman leaves a husband, her lap is filled with fruit and flowers, and a lighted hanging brass lamp is waved round her face, and without putting it out is thrown on one side upside down. Each married woman present takes a little redpowder from the dead brow and rubs it on her own brow, praying that like her she may die before her husband dies. A man's body, except the waistband, is left bare, yellow powder is rubbed on the brow, garlands of sweet basil leaves are thrown round the neck, and he is laid on the bier and covered with a sheet. If he leaves a widow of more than fifteen, old widows lead her into a room, her bodice is stripped, her glass bangles are broken on her wrists, her lucky necklace of black beads is torn from her neck, and her head is shaved. The hair, the broken bangles, and the lucky string of black beads are rolled *in* her bodice and laid near the head of the dead.

The bier is raised on the shoulders of four of the nearest male relations, and is carried out feet first close after the chief mourner who walks with an earthen pot of burning cowdung cakes hanging from his hand in a three-cornered bamboo sling. With the chief mourner walk two other men, one holding a metal pot with the rice which was cooked near the feet of the body, and the other a bamboo winnowing fan with parched pulse and small bits of cocoa-kernel, which, as he walks, he throws before him to please the evil spirits. Of the men who have come to the house some follow bareheaded, saying Ram Ram in a low tone; the rest go to their homes. The body is carried at a slow pace, the chief mourner keeping close in front that no one may pass between the fire and the body. No woman goes to the burning ground. The friends take the women and the children and bathe them, get the floor where the body was laid, the veranda, and, which is never done at any other time, the house steps washed with water and cowdung, arrange for the mourner's dinner, and go home. On nearing the burning ground a small stone called ashma or the soul is picked up. To this stone as a type of the dead funeral cakes and offerings are made. Further on, the litter is lowered, a ball of rice and a copper coin are laid on the ground, and, without looking back, the bearers change places, and for the rest of the way carry the bier in their hands.

At the burning ground, where the pile is to be raised, a small hole is made, and filled with water and in the hole blades of sacred grass and sesamum seed are laid. From the earthen pot fire is dropped on the ground, and, while the priest says texts, the chief mourner kindles the holy fire. When the pile is ready, the chief mourner draws three lines on the ground with a piece of firewood, and from the hole sprinkles

water on the pile. The bearers pour water on the body, lift the litter three times, touch the pile, and lay the body on it with the head to the south. From a small stick butter is dropped into the mouth, nostrils, eyes, and ears. Five small unbaked wheaten balls are laid, on the mouth, on each shoulder, on the brow, on the navel, and on the breast, and, if a person has died on an unlucky day, rice-flour figures of men are laid beside it. When this is done, each man lays on the breast a small piece of sandalwood. The chief mourner, taking a little water and few blades of sacred grass, walks round the pile. Layers of cakes are heaped over the body, and it is made ready for burning. The bier is turned upside down, thrown on one side, and taken to pieces.

The winding sheet is carried off by some Mhar, the date mat is destroyed, and the bamboo poles are kept for stirring the fire. The chief mourner is called, a brand is put in his hand, and, going thrice round the pile with his right hand towards it, shifts his sacred thread to his right shoulder, and, looking towards the north, applies the brand near the feet. He fans the fire with the hem of the shoulder cloth which is twined, with his sacred thread. Except a few who know how to burn the pile, the rest with the chief mourner sit some way off. When the fire bursts into flames, and the body begins to burn, the party withdraw still further, and, till the burning is over, talk, laugh, joke, smoke, a few even chewing betel. During the last two or three years the chewing of betelnut and leaves at the burning ground has come into fashion, A few young Prabhus even go so far as to drink sodawater and lemonade.] When the skull bursts, which is known as kapal moksh or the skull-freeing the chief mourner goes near the pyre, and throws cocoa-milk over it to cool the body. When all is burnt and it is time to put out the fire, the chief mourner, carrying on his right shoulder an earthen pot filled with water, and starting from the west side with his left shoulder towards the pyre, begins to walk round it. When he comes to the south near where the head lay, one of the relations makes a small hole in the earthen pot with the life-stone or ashma, and as the chief mourner goes round the water trickles through the hole. At the end of the first round, on coming back to the south, a second hole is made with the stone and a second stream runs out. At the end of the second round a third hole is made, and after making a third turn, at the south end he turns his back to the pyre and drops the jar from his shoulder so that the jar dashes on the ground and the water spills over the ashes. The chief mourner strikes his mouth with the back of his right hand and cries aloud. After this, the rest of the party pour on the fire pot upon pot of water, and the ashes are carried away and thrown into the sea. [At some rich funerals the body is covered with a Kashmir shawl, sandalwood is mixed with other

firewood, and the fire is quenched with milk instead of with water.]

A three-cornered earthen mound is raised in the centre of the spot where the body was burnt. On the mound cowdung and water are sprinkled, sacred grass is strewn, and on the grass are set five earthen pots full of water, a few bits of sacred grass, sesamum seed, rice rolled into balls and mixed with sesamum seed and barley, wheat cakes and butter, a thread from the chief mourner's waistcloth, a few flowers, sprigs of sweet basil, and small yellow flags. The chief mourner lights camphor and burns frankincense before the balls, and asks the dead to accept the offering. Then, one after the other, the mourners shift the sacred thread to the right shoulder, and thrice offer water to the soul-stone saying: 'Since by burning you are heated and that the heat may cool we offer thee, naming the deceased and his family, water. May this offering reach you.'

Then the party start for the house of mourning, the chief mourner going first, carrying in his hand the soul-stone in a metal vessel wrapped in fragments of the shroud. When the mourners return the women in the house again burst into weeping. The chief mourner is bathed on the front steps of the house, and the others wash their hands feet and mouths and go inside. Then the relations quiet and comfort the women, and make the mourners take food. After the mourners have begun to eat, the friends bow to the lamp which is kept burning on the spot where life left the dead, and return to their homes.

After Death.

For ten days the spirit remains seated on the eaves of the house where it left the body. At sunset, that the spirit may bathe and drink, two plantain-leaf cups are placed on the eaves, one full of milk the other full of water. During the ten days when the spirit of the dead still rests on the house-top the mourners are bound by strict rules. Except to worship at the burning ground the chief mourner does not leave the house for thirteen days after the funeral. The members of the family eat no animal food, nor any food or drink in which sugar is mixed. Leaves are used instead of metal plates. They neither buy. nor cook, eating only fish, herbs, and things sent them by their relations and friends, and cooked by some one who stays with them to comfort them. They neither worship their family gods, nor say their prayers; and husbands sleep away from their wives, on blankets or mats, or on the bare ground. On the second day after the death, at the burning ground the chief mourner cooks or hires a Brahman to cook rice-balls

and wheat cakes, offering them as he offered them on the first day that the dead may gain a new body. On the first day the dead gains his head, on the second day his ears eyes and nose, on the third his hands breast and neck, on the fourth his middle parts, on the fifth his legs and feet, on the sixth his vitals, on the seventh his bones marrow veins and arteries, on the eighth his nails hair and teeth, on, the ninth all remaining limbs and organs and his manly strength, and on the tenth he begins to hunger and thirst for the renewed body. On this day the lamp, which has been kept lighted in the house since the mourners came back from the burning ground, is upset, the lighted wick is pulled in from below, and the wick is taken to the burning ground for the tenth day's ceremony. As the light goes out the soul of the dead leaves the house and the women raise a cry of sorrow. On reaching the; burning ground, the chief mourner makes a three-cornered mound of earth, and sprinkles cowdung and water on it. He strews turmeric powder, sets five earthen pots on five blades of sacred grass, three in one line and two at right angles. He fills these five pots with water, throws in a few grains of sesamum, and over their mouths lays a wheaten cake and a rice-ball. He plants small yellow flags in the ground, and, setting up the soul-stone, strews flowers before it, and waving burning frankincense and lighted lamps prays the dead to accept the offering. If a crow comes and takes the right-side ball the dead died happy. If no crow comes the dead had some trouble on his mind. With much bowing he is told not to fret, his family and goods will be cared for, or if the ceremony was not rightly done the fault will be mended. In spite of these appeals, if for a couple of hours the crow will not take the rice, the chief mourner touches the ball with a blade of sacred grass. He then takes the soul-stone and rubbing it with sesamum oil to guench the hunger and thirst of the dead, he offers it a rice ball and water, and standing with it near water, facing the east, throws it over his shoulder into the water. This ends the tenth day ceremony. During these ten days friends and relations grieve with the mourners staying with them daily till dusk. On the eleventh day the chief mourner goes to some charity-house or dharmshala to perform the *shraddh* or memorial service. in performing the *shraddh* the chief mourner The chief mourner is the eldest or the only son. If there is no son there is no yearly shraddh. smears a plot of ground with cowdung and water, and placing a few blades of the sacred darbha grass on one side, sits on them, and draws rings of sacred grass on the ring-fingers of both his hands. He sots before him a lighted metal lamp, a waterpot, a cap, a ladle, and a platter filled with flowers, grain, spices, and other articles. The details are: Flowers, sweet basil leaves, sacred grass, barley, sesamum, rice, butter, curds, milk, sugar, scented powder, frankincense, cotton wicks dipped in butter, betel, plantains,

and copper and silver coins. He dips a sweet basil leaf in the watercup, and sprinkles water from it over himself and the articles of worship. For the gods he sets two blades of sacred grass on two spots in front of him and a little to the right; he then shifts [During the shraddh the mourner has to shift his sacred thread to his right Shoulder when offering to the spirit of the dead, and to his left when offering to the gods. When offering to the spirit of an ascetic or sadhu the thread is hung round the neck like a chain. his sacred thread to his right shoulder and lays on his left six blades, three for paternal and three for maternal ancestors, praying both the gods and the ancestors to come and sit on the grass. He spreads sacred grass in front of the spots where the gods and the forefathers are seated, and sets leafcups on them. From another leaf-cup he sprinkles water on the cups from the point of a sacred grass leaf. He lays sacred grass on the rims of the cups, partly fills them with water, putting barley in the gods' cups and sesamum in the forefather's cups, and lays betel, plantains, and copper coins before them. One after another the cups are taken up, smelt, and laid down. The sacred grass that lay on the rim of the cups is laid on the priest's right palm, and the sacred grass that was under the cups is held by the mourner in his own hand, and from it he pours water from the cups on the priest's hand. He piles the cups in three sets. Then his cook or some other elderly woman hands him a pound of freshly cooked rice. In the rice he mixes a little butter and barley and a few sweet basil leaves, rolls them into balls, and lays them on a bed of sacred grass. Over the balls he sprinkles water, flowers, sweet basil leaves, and scented powder, and lays on the top a thread from his waistcloth, and offers the balls cooked rice, vegetables, cakes, sweet milk, betel, a cocoanut, and copper and silver coins, waves lighted cotton wicks and camphor, and makes a low bow. He takes the middle ball and smells it in the hope that it may lead to the blessing of a son. He pays the priest 1s. to 4s. (8 as.-Rs.2) and the priest retires. The chief mourner gathers the offerings, gives them to a cow, and closes the ceremony setting on the housetop a leaf-plate filled with several dishes. On the evening of the twelfth day the chief mourner is brought home by relations and friends. When he reaches home he washes his hands and feet, and, standing on the edge of the veranda, with joined hands, dismisses the company with low repeated bows. On the morning of the thirteenth day, to purify the spot on which the deceased died, it is made clean, a mound is raised over it, and a sacred fire is kindled. To raise the spirit of the dead from this world where it would roam with demons and evil spirits to a place among the shades of the quardian dead, the shraddh ceremony is again performed. When the second shraddh is over part of the deceased's property is given to Brahmans. [During the shraddh the

mourner has to shift his sacred thread to his right Shoulder when offering to the spirit of the dead, and to his left when offering to the gods. When offering to the spirit of an ascetic or sadhu the thread is hung round the neck like a chain.] If the dead was a man, his clothes, bedding and cot, snuff-box, walking stick, and sacred books are given; if the dead was a married woman her wearing apparel, ornaments, combs, lucky necklaces, and redpowder boxes are given to married Brahman women whose feet are washed with cocoanut Water. A certain uncleanness or dishonour attaches to the Brahmans who take these presents. In return the priest gives the mourner a little sugar to eat. Then, laying a little of each dish on the eaves to feed the crows, the guests and the chief mourner dine together, the guests now and then asking the chief mourner to taste the dishes prepared with sugar. The chief dish is milk boiled with sugar and spices. In the evening relations and friends come and present the mourner with snuffcoloured turbans, one of them being folded and placed on his head. Then the mourner, dressed in his usual clothes, leads the company to the nearest temple. At the temple he offers oil cocoanuts and money, and the others stand outside or come in and bow to the gods. When his offerings are over, the chief mourner leads the company back to his house, and dismisses them, and is free to follow his daily duties. This evening all the married women go to the houses of their parents, and the little married girls to the houses of their husbands, and not a particle of cooked food is left in the house. On the sixteenth day the mourner performs a ceremony for the dead that he may not suffer from hunger or thirst. Every month for a year this ceremony. is repeated, and after that on the death day and also on the corresponding day of the month in Bhadrapad or August-September, when the dead hover round their kinsmen's houses looking for food.

Corpse-less Funeral.

Besides the regular funeral ceremonies when death takes place at home, special rites are sometimes performed when there is no body to burn. There may be no body to burn either because the deceased died in a distant land or was drowned at sea, or the burning may be symbolic, done while the person is alive, to show that he is dead to his family and caste. Sometimes when a wife has forsaken her husband and will not return, he performs her funeral and from that day will never see her face again. Or if a Prabhu gives up his father's faith and turns Christian or Musalman, either at or after his change his parents perform his funeral rites. In these cases, the chief mourner with the family priest and one or two near relations go to the burning ground and spread the skin of a black antelope in a corner. On the antelope

skin the chief mourner lays three hundred and sixty palas leaves, forty leaves for the head, ten for the neck, one hundred for both arms, ten for the ten fingers, twenty for the chest, forty for the belly, one hundred and thirty for the legs, and ten for the ten toes. Tying them by their stems with sacred grass in separate bunches and laying them on their former places, he spreads more grass on the leaves, and rolls the whole into a bundle a foot or eighteen inches long. He holds the bundle in front of him, mixes about a pound of wheat-flour honey and butter, and rubbing the mixture on the bundle draws a white cloth over it. At its top, for the head he places a cocoanut, for the brow a plantain leaf, for the teeth thirty-two pomegranate seeds, for the ears two pieces of shell, for the eyes two kavdi shells their corners marked with redlead, for the nose sesamum flower or seeds, for the navel a lotus flower, for the arm bones two carrots, for the thigh bones two brinials, lemons and Abrus or qunia berries for the breasts, and sea shells or a carrot for the other parts. For the breath he puts arsenic, for the bile yellow pigment, for the phlegm sea foam, for the blood honey, for the urine and excrement cow's urine and dung, for the seminal fluids guicksilver, for the hair of the head the hair of a wild hog, for the hair of the body wool, and for the flesh he sprinkles on the figure wet barley-flour honey and butter. He sprinkes milk, curds, honey, butter, sugar, and water on the figure, and covers the lower part of it with a woollen cloth. He puts on its chest a sacred thread, round its neck a flower necklace, touches the forehead with sandal, and places on its stomach a lighted flour-lamp. The body is laid with its head to the south and is sprinkled with rice and the life of the dead is brought into it. When the lamp flickers and dies the mourner offers the gifts and performs the ceremonies which are usually performed to a dying man. When the lamp is out he raises a pile of wood, and burns the figure with full rites, mourning ten days and going through all the after-death or shraddh ceremonies. The special expenses of such a funeral are:

Corpse-less Funeral.

| ARTICLE. | Cost. | | | ARTICLE. | Cost. | | |
|------------------|-------|----|----|---------------|-------|----|----|
| | Rs. | a. | p. | | Rs. | a. | Ρ. |
| Deer Skin | 1 | 0 | 0 | Cowdung | 0 | 0 | 1 |
| 360 Butea Leaves | | | | Limes, two | 0 | 0 | 2 |
| Two Cocoanuts | 0 | 1 | 6 | Brinjals, two | 0 | 0 | 6 |

| Plantains | 0 | 2 | 0 | Carrot, one | 0 | 0 | 1 |
|--------------------------|----|---|---|--------------------|---|----|---|
| Plantain Leaf | 0 | 0 | 3 | Hog-hair | 0 | 2 | 0 |
| Pomegranate | 0 | 1 | 0 | Woollen Waistcloth | 2 | 0 | 0 |
| Bangles, two | 0 | 0 | 2 | Wheat Flour | 0 | 1 | 0 |
| Cowri Shells | 0 | 0 | 1 | Five Cow-Gifts | 0 | 0 | 3 |
| Sesamum Flower | 0 | 0 | 3 | Rice | 0 | 0 | 2 |
| Talc | 0 | 0 | 2 | Lotus Flower | 0 | 0 | 1 |
| Yellow Orpiment | 0 | 0 | 3 | Abrus Berries | 0 | 0 | 2 |
| Cuttle Fish Scale | 0. | 0 | 3 | Wool | 0 | 0 | 3 |
| Gorochan | 0 | 0 | 3 | Barley Flour | 0 | 1 | 0 |
| Quicksilver | 0 | 1 | 0 | Sacred Thread | 0 | 0 | 6 |
| Red Sulphuret of Arsenic | 0 | 0 | 3 | Garland | 0 | 1 | 0 |
| Honey | 0 | 0 | 3 | Total | 3 | 15 | 0 |
| Cow's Urine | 0 | 0 | 1 | Total | | 13 | U |

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Religion.

A few Prabhus are of the Shaiv sect of Brahmanic Hindus, but most are followers of Shankaracharya (700-800) whose representative, the head of the Shringeri monastery in West Maisur, is the pontiff of all members of the Smart sect. The Smarts hold the ekdvait or single belief that the soul and the universe are one. Few Prabhus become ascetics or religious beggars. In childhood all are taught Sanskrit prayers and know the details of the ordinary worship. But, except the women and some of the older men, beyond marking feast days by specially good living, few attend to the worship of the gods or to the rules of their faith. Each day on waking the first thing a Prabhu looks at is a gold or diamond ring, a piece of sandalwood, a looking glass, or a drum. He rubs the palms of his hands together and looks at them for in them dwell the god Govind and the goddesses Lakshmi and Sarasvati. Then he looks at the floor to which, as the house of the god Narayan and of his wife Lakshmi, he bows, setting on it first his right foot and then his left. Next with closed eyes, opening them only when before the object of his worship, he visits and bows to his house gods, his parents, his religious teacher, the sun, the basil plant, and the cow.

About nine, after his bath, he goes to the god-room to worship the house gods. On entering the room he walks with measured steps so that his right foot may be the first to be set on the low stool in front of the gods. His house gods are small images of gold, silver, brass, and stone, generally a Ganpati, a Mahadev in the form of the ban or arrowhead stone ling, The ban or arrow-headed brown stone is found in the Narbada, a Vishnu in the form of the pierced shaligram The shaligram, is a round black stone found in the Gandaki river in Nepal. It sometimes has holes in the shape of a cows foot or of a flower garland, and is believed to be bored by Vishnu in the form of a worm, and in specially sacred as the abode of Vishnu under the name of Lakshmi-Narayan.] the conch or shankh, and the chakrankit or discus marked stone, a sun or surva and other family gods and goddesses. These images are kept either in a dome-shaped wooden shrine called devahara or the gods' house or on a high wooden stool covered with a glass globe to save the gods and their offerings from rats. Rats are troublesome in Hindu houses and are either poisoned or caught in traps, except on Ganesh's Birthday in August when balls of rice flour, cocoanut scrapings, and sugar are thrown to them. In worshipping his house gods, the Prabhu seats himself before them on a low wooden stool, and, saying verses, lays ashes on the palm of his left hand, and, covering the ashes with life right hand, pours one or two ladlefuls of water on the ashes, rubs them between the palms of both hands, and, with the right thumb, draws a line from the tip of the nose to the middle of the brow, thence to the corner of the right temple, and then back to the corner of the left brow. He closes his hands so that the three middle fingers rub on each palm, opens them again, and draws lines on his brow, those from left to right with the right hand fingers, and those from right to left with the left hand fingers. He rubs ashes on his throat, navel, left arm, breast, right arm, shoulders, elbows, back, ears, eyes, and head, and washes his hands. He ties his topknot, pours a ladleful of water on the palm of his right hand, and turns his hand round his head. He says his prayers or sandhyas [Sandhya, literally joining that is twilight, includes religious meditation and repeating of verses. It should be repeated thrice a day, at sunrise, noon, and sunset. Most Prabhus say prayers in the morning, none at noon, and a few at night.] sips water, repeats the names of twentyfour gods, and, holding his left nostril with the first two fingers of his right hand, draws breath through his right nostril and closing that nostril with his thumb, holds his breath while he thinks the Gayatri verse. This very holy and secret verse should every day be thought on. It runs; Om! Earth! Sky! Heaven! let us think the adorable light, the sun; may it lighten our minds. Compare Descartes (1641) (Meditation III. The Existence of God); 'I will now close my eyes, stop

my ears, call away my senses and linger over the thought of God, ponder his attributes, and gaze on the beauty of this marvellous light.' Rene Descartes by Richard Lowndes, 151 and 168. He raises his fingers, breathes through his left nostril, and, with his sacred thread between his right thumb and first finger, holding his hand in a bag called gomuki that is cow's-mouth or in the folds of his waistcloth, he ten times says the sacred verse under his breath. He then sips water and filling a ladle mixes the water with sandal powder and a few grains of rice, and bowing to it spills it on the ground. He takes a water jar, sets it on his left side, pours a ladleful of water into it, covers its mouth with his right palm, rubs sandal powder and rice grains on the outside, and drops flowers on it. He worships a little brass bell, ringing it and putting sandal powder, rice, and flowers on it. He worships the conch shell and a small metal water-pot which he fills with water for the gods to drink. He takes the last day's flowers, smells them, and puts them in a basket so that they may be laid in a corner of his garden and not trampled under foot. He sets the gods in a copper plate, and bathes them with milk, curds, butter, honey, and sugar, and, touching them with sandal powder and rice, washes them in cold water, [During the Divali holidays the gods are rubbed with scented powder and bathed in warm water.] and dries them with a towel, and putting them back in their places, with the tip of the right ring-finger marks the *ling* with white sandal powder and Ganpati and Surya with red. He sprinkles the gods with turmeric, red and scented powder, and grains of rice. He sprinkles the ling with white flowers and Ganpati with red, the *ling* and *shaligram* with *bel* and sweet basil leaves, and Ganpati with bent grass or durva. He lays sugar or cooked food before them and rings a bell which he keeps on ringing at intervals during the whole service. He offers them sugar, covering it with a basil leaf and sprinkling water over the leaf, and drawing a towel over his face, waves his fingers before the gods, and prays them to accept the offering. Waving burning frankincense a lighted butter lamp and camphor, and taking a few flowers in his open hands, he stands behind the low stool on which he had been sitting and repeating verses lays the flowers on the gods' heads, passes his open palms above the flames, rubs them over his face, and going round the dome where the gods' images are kept, or if there is no room turning himself round, bows to the ground and withdraws.

He goes to the stable, sits on a low wooden stool before the cow, throws a few grains of rice at her, pours water over her feet, touches her head with sandal and other powders, rice, and flowers, offers her sugar, waves a lighted lamp, and goes round her once, thrice, five, eleven, or one hundred and eight times, and, filling a ladle with water,

dips the end of her tail in it and drinks. With the same details he worships the basil plant, [To Prabhus, 'Tulsi, Krishna's wife, is the holiest of plants. No Prabhu backyard is without its tulsi pot in an eight-cornered altar. Of its stalks and roots rosaries and necklaces are made. Mothers worship it praying for a blessing on their husbands and children.] and last of all the sun, before whom he stands on one foot resting the other foot against his heel, and looking toward the sun and holding out his hollowed hands begs the god to be kindly. Then taking an offering or arghya, of sesamum barley red sandal and water in a copper boat-shaped vessel, he holds it on his head and presents it to the deity. These rites are generally performed in the morning, either by the master of the house if he has the mind and the time, or by a Brahman, who is a different man from the family priest and is paid one or two shillings a month. [A hired Brahman in worshipping the family gods uses water not milk, and in some cases the master of the house bathes the gods in water. On great worships or mahapujas, the gods are bathed first in milk and then in water. In the evenings a Hindu doss not bathe his gods but puts fresh flowers on them, offers them sugar to eat, and waves a lighted lamp before them.]

Fasts and Feasts.

Before taking their morning meal the elder women of the house, especially widows, tell their beads [These rosaries or *malas* have one hundred and eight beads made either of rough brown berries called *rudraksha* or of light brown *tulsi* wood. While saying his prayers the devotee at each prayer drops a bead, and those whose devotions are silent hide their hand with the rosary in a bag of peculiar shape called the cow's mouth or *gomukhi*.] sitting on the low stools in the godroom with rosaries in their hands. The other women worship the gods and the basil plant when their husbands have gone to office. At any time in the morning or evening, before taking their meals, the boys come into the god-room and say Sanskrit prayers.

Month Days.

The Hindu month has two parts, the bright fortnight called the *shuddh* or *shukla paksha* that is the clean half, and the dark fortnight called the *vadya* or *krishna paksha* that is the dark half. Each fortnight has fifteen lunar days called *tithis*; the first *pratipada*, the second *dvitiya*, the third *tritiya*, the fourth *chaturthi*, the fifth *panchami*, the sixth *shashthi*, the seventh *saptami*, the eighth *ashtami*, the ninth *navami*, the tenth *dashami*, the eleventh *ekadashi*, the twelfth *dvadashi*, the thirteenth *trayodashi*, the fourteenth *chaturdashi*, the fifteenth in the

bright half is purnima or full-moon, and in the dark half amavasya, literally with-living, that is when there is no moon because the sun and moon live together. Of these the first lunar day which is called padva both in the bright and dark fortnights is thought lucky for any, small ceremony. There are three leading first days Gudi-padva the bannerfirst in bright Chaitra or March-April, Bali-pratipada Bali's first in bright Kartik or October-November, and Aje-padva the grandfather's first in Ashvin or September-October. [Ajepadva is celebrated for the performance of shraddhs in the name of the grand-father by the daughter's son while his parents are alive. Two second days are specially sacred, Yamdvitiya Yam's second in bright Kartik or October-November also called Bhaubij or the brother's second and Mahabij or the second. Two third days are important Akskayatritiya or the undying third in bright Vaishakh or April-May, and Haritalika or the bent-grass third in bright Bhadrapad October-November. Fourth day are of two kinds, Vinayaki or Ganpati's in the light half, and Sankashti or troublesome fourths in the dark halfs. The sankashti are by some kept as evil-averting fasts. On all bright fourth and specially on the fourth of Bhadrapad or August - September Ganpati is worshipped, and at nine at night, after 'bowing to the moon, rice balls are eaten. Of fifth days, Nagpanchami or the cobra's fifth in bright Shravan or July-August, Rishipanchami or the seers' fifth in Bhadrapad or August-September, Lalitapanchami or Lalita's fifth in bright Ashvin or October-November, Vasant panchami the spring, and Rangpanchami the colour fifth in bright Phalgun or March - April. Two-sixths are important Varnashasthi or the Pulse sixth in bright Shravan or July-August, and the Champashashthi or the Champa sixth in bright Margashirh or December-January. On the Champashasthi day the worshippers of Khandoba hold a feast. Brinjals after a break of nearly five months, since Ashadh or June-July, again begin to be eaten. Of the sevenths two are important Shital or the cold seventh in bright Shravan or July-August, and Rath or the car seventh in bright Magh or January-February. Of the eighths one is important Janma or the birth eighth, that is Krishna's birthday also called Gokul from Krishna's birthplace. Of the ninths one is important Ram or Ram's birthday in bright Chaitra or April-May. Of the tenths, all of which are holy and kept as fasts by the strict, the chief is Vijaya or Victory tenth the same as Dasara in bright Ashvin or September-October. Of the elevenths, all of which are holy and kept as fasts by the strict, two are important the Ashadh eleventh in bright Ashadh or June-July, and the Kartik eleventh in bright Kartik or October-November. Of the twelfths, all of which are holy and kept as fasts by the strict, two are important Vaman or the Dwarf Vishnu's Twelfth in bright Bhadrapad or August-September, and Vagh or the Tiger's Twelfth in dark Ashvin or October -November. Of

the thirteenths called *Pradosh* or evening, because on that day food cannot be eaten before looking at the stars, all are sacred to Shiva, and one is specially sacred if the day falls on a Saturday. Of these the chief is Dhan or the Wealth Thirteenth in dark Ashvin or October-November. Of the light fourteenths two are held in honour Anant or Vishnu's Fourteenth in Bhadrapad or September-October, and Vaikunt or Vishnu's Heaven's Fourteenth in Kartik or November - December. All the dark fourteenths are nailed Shivratris or Shiv's nights. The chief are Nark or the demon Nark's Fourteenth in Ashvin or October-November and *Mahashivaratri* or the Great Shiv's night in *Magh* or February-March. Of the fifteenths the bright fifteenth as *Purnimas* or Full Moons are sacred. There are five chief full moons Vata or the Banyan Full Moon in Jeshth or May-June, Narali or the Cocoanut Full Moon in Shravan or July-August, Kojagari or the Waking Full Moon in Ashvin or October-November, the Vyas or Puran expounder also called the Tripuri or Three Demons' Full Moon in Kartik or November-December, and Hutashani or the Fire Full Moon also called Holi or Shimga in *Phalgun* or March-April. On the dark fifteenths called Amavashvas or together-dwellings cakes are offered to the spirits of the dead. Three together-dwellings or no-moon nights are specially holy, Divali or Lamp No-Moon, also called Pithori or Spirits No-Moon in Shravan or August-September, Sarvapitri or All Spirits' No-Moon in Bhadrapad or September-October, and a second or greater Divali or Lamp No-Moon in Ashvin or October-November. If no-moon day falls on a Monday it is called Somvati or the Monday No-Moon. This is a specially holy day on which Prabhu men and women bathe early and give Brahmans money.

Sunday.

Of the days of the week Sunday or *Aditvar* is sacred to the sun. The sun is a red man seated in a car, with a quoit, and sometimes a lotus in his hand, driving a team of seven horses. The sun is the father of some of the heavenly beings, and among men of the Kshatriya or warrior race. He is the eye of God, or God himself; Brahma in the morning, Vishnu at noon, and Mahadev at night. Sunday is a good day for sowing seed, for beginning to build, for holding a fire; sacrifice, for planting a garden, for beginning to reign, for singing and playing, for starting on a journey, for serving a king, for buying or giving away a cow or an ox, for learning and teaching hymns, for taking and giving medicine, for buying weapons gold and copper articles and dress. It is unlucky for a girl to come of age on Sunday; she will die a widow. It is unlucky to travel west, and a lizard falling on one's body means loss of wealth. On Sunday nights a green robe should be worn.

Monday.

Monday or *Somvar* is sacred to the moon. The moon is a male deity, large gentle and kindly, young and sweet-faced, a warrior with four arms, a mace in one and a lotus in another, seated on a white antelope. Monday is good for beginning a war, mounting a new horse elephant or chariot; for buying flowers, clothes, hay, plants, trees, water, ornaments, conch-shells, pearls, silver, sugarcane, cows, and she-buffaloes. It is unlucky for a girl to come of age on a Monday; her children will die. A blow from a falling "lizard brings wealth. At night a parti-coloured robe should be worn.

Tuesday.

Tuesday called *Mangalvar* or the day of the planet Mars. The planet Mars, who is sprung from the sweat of Mahadev's brow and the earth, is four-armed, short, and fire-coloured. He is a warrior, quick-tempered, overbearing, and fond of excitement. Tuesday is good to fight and to forge or work with fire, to steal, poison, burn, kill, tell lies, hire soldiers, dig a mine, and buy coral. If a girl comes of age on Tuesday she commits suicide. A blow from a falling lizard takes away wealth. On Tuesday nights a red robe should be worn.

Wednesday.

Wednesday is called *Budhvar* the planet Mercury's day. The planet Mercury is the son of the moon and a star. He is middle-sized, young, clever, pliable, and eloquent, in a warrior's dress, and seated in a lion-drawn car. Wednesday is good for becoming a craftsman, for study, for service, for writing, for painting, for selling metals, for making friends, and for arguing. It is unlucky for going north. If a girl comes of age on a Wednesday she bears daughters. A blow from a falling lizard brings wealth. On Wednesday night yellow should be worn.

Thursday.

Thursday, *Brihaspatvar*, the planet Jupiter's day, is sacred to Brihaspati the teacher of the gods. He is a wise old Brahman, large, yellow-skinned and four-armed, seated on a horse Thursday is a good day to open a shop, to wear ornaments, to give charity, to worship the planets, to learn reading and writing. For a married woman it is good for such pious acts as will prolong her married life, for buying clothes, for house work, for going on pilgrimage, for sitting in a chariot or on a horse, for making new ornaments, and for taking medicine It is a bad

day for going south. Thursday is a good day for a girl to come of age she will bear sons. A blow from a falling lizard brings wealth. On Thursday nights white should be worn.

Friday.

Friday or *Shukravar*, the planet Venus' day, is sacred to Shukra the Brahman teacher of the giants, gentle, ease-loving, middle-aged, with four arms. He is seated on a horse. Friday is the proper day for worshipping Balaji. It is a great day for eating parched gram. Clerks club together to lay in a store at their offices, and women, to free their husbands from debt, send presents of parched gram to Maratha schools. Friday is a good day for buying precious stones, sandalwood, clothes, a cow, treasure, for sowing seed, for making ornaments, and for a woman to sing or hear singing. It is a bad day to go west. A girl who comes of age on a Friday bears daughters. A blow from a falling lizard brings wealth. On Friday nights a white robe should be worn.

Saturday.

Saturday, called *Shanvar* or the slow mover, is the planet Saturn's day. Shanvar, a Shudra some say a Chandal by caste, is four-armed, tall, thin, old, ugly, and lame, with long hair nails and teeth, riding on a black vulture. He is sour-tempered and bad, the patron of evil-doers, who on Saturdays make offerings at his shrine. Saturday is good to buy metal, swords, and slaves, to sin, to steal, to make poison, to enter a new house, to tie an elephant at one's door, and to preach. It is a bad day to travel east and to start on a journey. Children who eat gram on Saturdays bring poverty and become horses. A girl who comes of age on Saturday becomes a bad character. A blow from a falling lizard takes away wealth. On Saturday nights a black robe is worn.

Months.

The twelve Hindu months are, Chaitra or March-April, Vaishakh or April-May, Jeshta or May-June, Ashadh or June-July, Shravan or July-August, Bhadrapad or August - September, Ashvin or September - October, Kartik or October - November, Margashirsh or November-December, Paush or December-January, Magh or January-February, and Falgun or February - March. Of these months Shravan or July-August is the holiest. Almost every day in Shravan is either a fast or a feast. Its Mondays are holy to Shiv, its Tuesdays to Shiv's spouse Mangalagauri, its Fridays to Vishnu, and its Saturdays to Hanumant.

Besides the regular months, extra or adhik months are occasionally added, and, sometimes, though more rarely, a month is dropped and called the kshay mas or dropped month. [Professor Keru Lakshman] Chhatre has kindly given the following explanation of extra and suppressed months., As the Hindu year is a lunar year fitted to solar periods it falls short of the solar year by eleven days, or in three years by a month and three days. To each of the twelve lunar months one of the twelve Zodiacal divisions or sankrants is allotted, and as the sankrants vary in length from twenty-nine to thirty-two and a half days, while the lunar months are all about twenty-nine and a half days, it sometimes happens that a lunar month passes without any sankrant and sometimes that two sankrants fall in the same lunar month. If no sankrant falls a month is put in and if two sankrants fall a month is suppressed. Extra months do not come at regular intervals, but in nineteen years seven of them occur. Suppressed months are rarer; the last was in 1823 (Shak 1744), the next will fall in 1964 (Shak 1885).]

Holidays.

Of special fast and feast days there are altogether twenty-six., Of these three come in Chaitra or March-April, Gudipadva or the Bannerfirst the Shalivahan new year on the bright first, Ram's Birthday on the. bright ninth, and Hanuman's Birthday on the bright fifteenth or full-moon; one in Vaishakh or April - May, Akshay or the Immortal Third of the bright half; one in Jeshta or May-June, the Banyan Full-Moon; one in Ashadh or June-July, the bright eleventh; four in Shravan or July-August, Cobra Day on the bright fifth, Cocoanut Day on the full-moon, Krishna's Birthday on the dark eighth, and Durga's Attendants Day on the no-moon; seven in Bhadrapad or August-September, Haritalika's Day on the bright third, Ganpati's Birthday on the bright fourth, the Seers' Day on the bright fifth, Gauri's Day on the bright eighth or ninth, Vaman's Day on the bright twelfth, Anant's Day on the bright fourteenth, and All Souls Day on the dark fourteenth; three in Ashvi or September-October, Dasara the bright tenth, Kojagari the full-moon and the first two Divali days the dark fourteenth and fifteenth; three in Kartik or October-November, the last two Divali days the first and second of the bright half, the last of which is also known as Yam's Second, the Basil Wedding-day on the bright eleventh, and the Lamp Full-Moon; one in Paush or December-January, a variable lunar day Makar Sankrati or the Sun's entry into Capricorn; one in Magh or January-February Shiv's Night on the dark fourteenth; and one in Falgun or February-March the Holi Full-Moon.

Gudipadva.

Gudipadva, the Banner First, is the first day of Chaitra or March-April and the first day of the Shalivahan year. The day is sacred to the Deccan king Shalivahan whose nominal date is A.D. 78. The story is that in Pratishthan or Paithan on the Godavari, about forty miles north-east of Ahmadnagar, the daughter of a Brahman became with child by Shesh the serpent king, and was turned out of the city. She went to live among the potters and bore a son named Shalivahan. As a child Shalivahan martialled armies of clay figures, drilled his playfellows, and settled their quarrels showing surprising talent and wisdom. News of his talent came to Somkrant the king He sent for the boy, but the boy would not come. The king brought troops to take him by force, and Shalivahan breathed life into his clay figures, defeated the king, and took his throne. On this day Prabhus bathe early in the morning, rub themselves with scented oil, and to secure sweets for the rest of the year eat a leaf of the bitter *nim*, Azadirachta indica. From one of the front windows of every Prabhu's house a bamboo pole is stretched, capped with a silver or brass water-cup, a silk waistcloth hanging to it as a flag, with a long garland of bachelor's button-flowers and mango leaves. Below the flag, in a square drawn by lines of quartz powder, is a high metal or wooden stool, and on the stool, in honour of the water-god, is a silver or brass pot full of fresh water on whose mouth are set some mango leaves and a cocoanut. After an hour or two the water-pot and stool are taken into the house, but the flag is left flying till evening. During the day a Brahman reads out Maratha almanacs, telling whether the season will be hot or wet, healthy or sickly, and for each person whether the year will go well or ill with him. In the evening every family has a specially rich dinner. New year's day is good for beginning a house, putting a boy to school, or starting a business.

Ram's Ninth.

Eight days later on the ninth of *Chaitra*, or about the beginning of April, comes *Ramnavami* or Ram's Ninth, the birthday of the seventh incarnation of Vishnu, Ram, the hero of the Ramayan who became man to fight Ravan the giant-ruler of Ceylon. For eight days preparations have been made, Ram's temples are white washed, adorned with paintings and brightly lighted at night. Men and women throng them to hear Brahmans read the Ramayan, and Haridases or Ram's slaves preach his praises. On the ninth or birthday before noon, Prabhus, especially men and children, flock in holiday dress to Ram's temple, and listen to a preacher telling how Ram was born, and to

dancing-girls singing and dancing. At noon, the hour of birth, the preacher retires, and comes again bringing a cocoanut rolled in a shawl like a newborn babe, and showing it to the people lays it in a cradle. He tells the people that this is the god who became man to kill the wicked Ravan. The people rise, bow to the god, and full of joy toss red-powder, fire guns, and pass to each other *sunthvada* or presents of powdered dry ginger and sugar. Then all but the devout go home, and dine freely on wheat cakes, butter, sugar, milk, and fruit, rice fish and flesh being forbidden. In the evening they flock to the temples once more to hear Ram's praises.

Hanuman's Birth.

Six days after Ram's birthday, on the bright fifteenth or full- moon of *Chaitra*, generally early in April, comes the birthday of Ram's general Hanuman the monkey-god. In Hanuman's temples Brahman preachers tell Hanuman's exploits. Some old Prabhu women keep the day as a fast eating nothing but fruits and roots.

Akshayatritiya.

About eighteen days later on the third of *Vaishakh*, generally about the beginning of May, comes the Undying Third or *Akshayatritiya*. It gets its name because being the first day of the *Satya Yug* or the first cycle it is believed to secure the merit of permanency to any act performed on the day. For this reason gifts of earthen jars, fans, umbrellas, shoes, and money made to Brahmans have a lasting value both to the giver and to his dead friends. The day is not specially kept either as a feast or as a fast.

Banyan Full-moon

The Vad Pornima or Banyan Full-Moon falls about five weeks later on the Jeshta full-moon, generally early in June. On this day, to prolong their husbands' lives, Prabhu women hold a festival in honour of Savitri from which the day is also called Vadsavitri or Savitri's Banyan. This lady, who was the daughter of king Ashvapati, chose as her husband Satyavan the son of king Dumatsen. Soon after Savitri made her choice the seer Narad came to Ashvapati and told him that Dumatsen had become blind and lost his kingdom, and was wandering in the forests with his wife and son. Ashvapati wished his daughter to change her choice, but she would not, and, though the seer told her that within a year of their marriage her husband would die, she refused to give him up. Seeing that she was not to be shaken,

Ashvapati marched into the forest, and, giving his daughter a large dowry, married her to Satyavan. For a year she served her husband and his father and mother. Two days before the close of the year, when according to the seer's prophecy her husband must die, Savitri began to fast. On the second day, though she asked him to stay at home, Satyavan took his axe and went into the forest. Savitri followed and in spite of her prayers Satyavan went on and fell dead as he was hacking a fig tree. As Savitri sat by him weeping, Yama, the god of death, came and took Satyavan's soul. Savitri followed him and prayed him to give her back her husband's soul. Yam refused, but Savitri persisted, until he promised to give her anything short of her husband's life. She asked that her father-in-law might regain his sight and Yam granted this boon; Savitri still followed Yam and, refusing to let him go, gained from him her father-in-law's kingdom, a hundred sons for her father, and sons for herself. Then she once more pleaded, ' How can I have children if you take my husband,' and the god, pleased with her faith, granted, her prayer. She went back to the tree and touched her dead husband, and he rose, and they returned together to their home. She touched her father-in-law's eves and brought back their sight, and with his sight he received his kingdom. On the morning of this day, after bathing and dressing in rich silk clothes, married Prabhu women worship the Indian fig tree or vad. In front of a wall where pictures of a vad and a pipal tree have been painted, the woman sets a high wooden stool with a vad twig on it, and sits on a low wooden stool and worships the twig. When the worship is over she gives the priest a present called vahan, and touching it with the end of her robe repeats verses. [The present includes a round bamboo basket with a bodicecloth, a looking glass, five glass bangles, a necklace of black glass beads with a gold button, a comb, small round redpowder boxes, lamp-black and turmeric, five mangoes, a cocoanut betel, sprouting pulse, a glass spangle, and a copper coin. The whole is covered with another bamboo basket rolled round with thread She gives the priest one to two shillings, and the priest touching her brow with redpowder and throwing a few grains of rice over her, blesses her saying, 'May you remain married till your life's end and may god bless you with eight sons.' The chief dish on this occasion is mango-juice and fine soft rice flour cakes called pithpolis. Some women in performing this ceremony live for three days on fruit, roots, and milk.

Ashadhi Ekadashi.

About twenty-six days after the Banyan Full-Moon, generally about the beginning of July, the eleventh of *Ashad* or June-July is kept in honour

of the Summer Solstice, that is the twenty-first of June. This is the beginning of the gods' night, when, leaning on Shesh the serpent king, the gods sleep for four months.

Cobra Day.

About three weeks later on the bright fifth of Shravan, generally about the end of July, Prabhu women worship the *nag* or cobra. On a wooden stool nine snakes are drawn with sandalwood powder or redlead. Of the nine two are full grown and seven are young; one of the young snakes is crop-tailed. At the foot is drawn a tenth snake with seven small ones, a woman holding a lighted lamp a stone slab, and a well with a snake's hole close to it. All married women sit in front of the drawing and each throws over it parched grain, pulse, round pieces of plantains, cucumber, and cocoa kernel. Leaf-cups tilled with milk and pulse are placed close by redlead is sprinkled, and flowers are laid on the redlead. They pray the snakes to guard them and their families and withdraw. The eldest among them gathers the children of the house and tells them this story of the Nine Snakes and the Woman with the Lamp. A village headman had seven daughters-in-law. Six of them he liked and the seventh he hated, and, because she was an orphan, he made her do all the housework and live on scraps left in the cooking pots. One day, while the seven girls were at the house well, the six were boasting that their relations had come to take them home for feast; the seventh was silent, she had no home to go to. From their hole close by a male and female snake overheard the talk, and the male snake told his wife, who was then with young, that he would ask the seventh daughter-in-law to their feast and keep her till his wife's confinement was ever. In the afternoon, when the orphan went to graze the cattle, the male snake, in the form of a handsome youth, came to her and said; 'Sister, I am one day coming to take you home, so when I come be ready.' One day when the house people had dined, the orphan took the cooking pots to clean by the well side. She gathered the scraps in one pot and went to bathe on the other side of the well. While she was bathing the female snake came out of her hole and ate the scraps. The orphan came back to eat her dinner, and finding it gone, instead of cursing the thief, she blessed him, saying, ' May the stomach of the eater be cooled,' Hearing these words the female snake was overjoyed, and told her husband to lose no time in bringing the orphan home. The male snake, taking human form, went to the headman's house and told the orphan he was come to take her home. She asked no questions and went. As they went the snake told her who he was, and that on entering his hole he would turn into a snake. She was to hold him fast by the tail and follow. Trusting and

obedient the girl followed the snake, and, at the bottom of the hole, found a beautiful gold house inlaid with gems, and in the middle, on a hanging swing of precious stones, a female snake big with young. While the orphan held a lighted lamp the snake gave birth to seven voung ones. One of them climbed on to the girl and she in her fright let fall the lamp and it cut off part of the snake's tail. When the brood of snakes grew up they laughed at the crop-tailed snake, and he in auger, finding how he had been maimed, vowed to kill the headman's daughter. He made his way into the house on a day which chanced to be Nagpanchami Day. He found the girl worshipping snakes and laying out food for them. Pleased with her kindness the crop-tailed snake kept quiet till the girl left the room, ate the offering, and went back and told his parents of the girl's devotion. The old snakes rewarded her freely, making her rich and the mother of many children. When the story is over the children and the rest of the family have a good meal, chiefly of rice-flour balls. Bands of snake-charmers go about calling on people to worship their snakes, and the people worship them, offering parched pulse, grain, milk, and a copper coin. On the same day a fair is held in honour of snakes. Prabhu women fill leaf-cups with milk and pulse and place them in corners of the garden for snakes to feed on. As they are hurtful to snakes, no grinding baking or boiling are allowed in Prabhu houses on the Cobra's Fifth.

Cocoanut Day.

About ten days later, generally early in August, on the full-moon of Shravan, comes Cocoanut Day or Narli-pornima. In the evening, after a hearty afternoon meal, Prabhu men and children go to the river side, and to win the favour of the water throw in cocoanuts. On going home the men and children are seated on low wooden stools, and the women of the house wave a lighted lamp round their faces, the men according to their means presenting them with 1s. to 12s. (8 as.- Rs. 6).

Janma and Gokul Ashtami.

Eight days after, about the middle of August, comes a festival in honour of Krishna, either his birthday or the day after when he was taken to Gokul. The story is that Kansa, Krishna's uncle, hearing that Krishna would cause his death, tried to destroy him as a child but failed. This is the cowherds' great day. Covering themselves with dust and holding hands they dance in a circle, calling out Govinda, Gopala, Narayana, Hari. Curds, milk, and cold water are thrown over them, and they get presents of cocoanuts, plantains, and money. Those who

keep the birthday observe it as a fast; those who keep the second or *Gokul* day observe it as a feast.

Pithorya's No-Moon.

About a week after, at the *Shravan* new-moon, generally towards the end of August, comes the worship of the *Pithorya's* or attends of the goddess Durga. Married women with children alive bathe in the early morning and fast. On a high stool or wall redlead pictures of Durga's sixty-four attendants are drawn and worshipped. Then the oldest woman of the family offers the goddess the leaves of sixteen kinds of trees and flowers and a bunch of five to twenty-one cocoanuts, and prays her to bless the children of house. Then, arranging dishes of prepared food round her, worshipper calls the children one by one, asking them in turn is worthy to eat the offerings. The child answers, I am worthy. This is thrice repeated and the worshipper touches the child's brow with redlead, and, throwing grains of rice over it, bless it and gives it the plate. The children and grown people sit down together and eat the food.

Alika's day.

Three weeks later in *Bhadrapad* or August-September come fast in honour of the maid Alika. A king's daughter had vowed to wed none but Shiv. Her father, not knowing of her vow, offered her in marriage to Vishnu. Hearing this the king's daughter, with the help of her maid retired to a deep forest, refusing to move unless she was allowed to marry Shiv. In her honour, getting up early in the morning Prabhu women bathe, wash their hair and putting on a silk robe and bodice draw a guartz square and in it set a high wooden stool. Sitting before it on a low stool they lay a handful of sand in the middle of the high stool and with the sand make figures of Parvati and Sakhi, Shiv's wife and maid, and in front of them a ling. These three they worship with flowers and the leaves of sixteen kinds of trees, and as in the Vadsavatri fast present the Brahman priest with two round bamboo baskets and 1s. to 2s. (8 as.-Re. 1) in money On this day women drink no water and eat nothing but plantains and melon or chibud. Next morning they again worship the sand images, offering them cooked rice and curds and-cast them into the river, or into some out-of-theway place.

Ganpati's Birthday.

Next, on the fourth of Bhadrapad, generally late in August, comes the

birthday of 'Ganesh or Ganpati, the god of wisdom and of beginnings, in figure a fat man, seated, with four hands, and an elephant's head. Of the stories of Ganpati's birth the commonest is that Parvati, Shiv's wife, from oil and turmeric rubbed off her own body, made a man and set him to guard her door. Shiv coming in, annoyed at being stopped by the watchman, cut off his head. Hearing this Parvati demanded that her son's life should be restored, and Shiv going into the forest cut off a one-tusked she-elephant's head and setting it on Ganpati's shoulders brought back his life, making him for his trustiness god of wisdom.

Some time before Ganpati's birthday the reception hall is whitewashed and painted, a wooden framework or other seat is made ready, and the room is filled with rich furniture and at night is brightly lit. On the morning of the feast day the head of the house and some children and servants, with music and a palanquin, go to the market and buying an image of the god, [Ganpati's image is of gilt or painted clay, with four hands, a big belly, and an elephant's head. It is either made in the house or bought from men, chiefly of the Deccan Brahman caste, whose sole calling is the making of Ganpatis. The cost varies from a few pence to £15 or £20. Some do not buy clay Ganpatis but with rice grains on a plate trace an image of the god known as the pearl Ganpati.] seat it in the palanguin, and bring it home. At the house the mother of the family waves a lighted lamp before the god and it is laid down till the head of the house is ready to worship it. It is then set in the shrine and with the help of the family priest verses are recited that fill the image with the presence of the god. The image of a mouse, Ganpati's pet charger, is placed close to it. After the worship, the head of the house, with a lighted lamp in his hand and with his sons and relations round him, standing in front of the image, plays and sings hymns in praise of the god. This is done shortly in the morning and in the evening at greater length. At the end of the service sweetmeats are handed round among the guests and family. In the morning of the first day, at the end of the worship, the family feast on sweet-spiced rice-flour balls, and in the evening the mice are allowed to share in the feast. Ganpati, they say, one evening fell off his mouse. The moon laughed at the god's mishap, and to punish him Ganpati vowed that no one should ever look at the moon again. The moon prayed to be forgiven and the god agreed that the moon should be disgraced only one night in the year, Ganpati's birth-night. For this reason no one on that night will look at the moon.

According to the will and means of the family the image is kept in the house from one and a half to twenty-one days, in most cases about a week. So long as it is in the house the god is worshipped night and

morning. When the time comes for the god to go, in the evening players and a palanquin are hired, and a priest is called in. After praying Ganpati to bless the family, to keep sorrow from its doors, and to give wisdom to its children, verses like those that brought the presence of the god into the image are said and its divinity is withdrawn. Then waving a lamp round its face, laying a little curds in one of its hands, and seating it in a flower-decked palanquin, calling out the god's name as they go, they carry him to the side of a lake or river. At the water's edge they take the image out of the palanquin and seat it on the ground, and waving a lighted lamp round its face carry it into the water sorrowing that for another year they will not see the god again.

Bhadrapad bright-fifth, the day after Ganesh's birthday, is kept in honour of the Rishis or Seers who sit in heaven as the seven stars in the Great Bear. The day is kept only by women. Their chief rule is to eat nothing that is not hand-grown. Anything in which the labour of cattle or other animals has been used in rearing or bringing to market is forbidden. So hand-grown fruit and vegetables are on that day sold at four times their usual price.

Gauri.

On Bhadrapad bright-eighth or ninth, the third or fourth day after Ganesh's birthday, women hold a feast in honour of his mother Parvati or Gauri. In the morning ten or twelve balsam or terda plants are bought for an anna or so and hung on the eaves. About two in the afternoon, over the whole of the house, women draw quartz powder lines six inches apart and between them trace with sandal powder footsteps two in a line and four or five inches apart. An elderly married woman, taking one or two of the balsam plants, washes their roots and folds them in a silk waistcloth. [Prabhu women call the balsam roots Gauri's feet.]

This representing the goddess Gauri is laid in a girl's arms, who carrying a metal plate with a lighted lamp, a few rice grains, a redpowder box, and some round pieces of plantains, and taking with her a boy with a bell, starts through the house, the boy ringing the bell as they go. In each room the woman seats the girl who carries the goddess on a raised stool, waves a lighted lamp round the faces of the girl and of the goddess, and, giving the girl and the boy a bit of plantain, calls 'Lakshmi, Lakshmi, have you come?' The girl says, 'I have come.' The woman asks, 'What have you brought;' the girl says, 'Horses, elephants, armies, and heaps of treasure enough to fill your

house and the city.' Thus they go from one room to another, filling the house with treasure and bringing good luck. When they have been through the whole house, the goddess is seated on a high stool in the women's hall leaning against a wall, on which have been painted a Prabhu's house and all it holds. At lamplight the goddess is offered plantains, cakes, and milk, and at night she is richly dressed, decked with jewels, and with lamps lighted before her is offered milk and sugar. The next day is a time of great rejoicing, when many dishes of sweetmeats, fish, and mutton are cooked, offered to the goddess and eaten. The dish offered to the goddess varies in different families. Some offer vegetables, some pickles, some fish, some goat's flesh, and some a cock and liquor.] During the day Kunbi and Koli women and the house servants dance before the goddess and are well paid. On the third day the goddess is offered cooked food, and about three o'clock she is laid in a winnowing fan, stripped of her ornaments, except her nosering glass bangles and necklace of black glass beads, and with some cooked food tied to her apron and four copper coins is placed in a servant's arms. Without looking behind him, while an elderly woman sprinkles water on his footsteps, the servant walks straight out of the house to the river or lake side, and, leaving the goddess in the water, brings back the silk waistcloth, the winnowing fan, a little water, and five pebbles.

Vaman Dvadashi.

Vaman Dvadashi or Vaman's Twelfth falling on the twelfth of Bhadrapad generally in September, is sacred to Vaman, the black Brahman dwarf, the fifth incarnation of Vishnu. Vaman's story is that to keep the religious merit of the great king Bali from winning him the rule over the three worlds, Vishnu appeared at his court as a Brahman dwarf. He beat all other Brahmans in explaining the holy books and the king asked him what gift he would wish. Vaman said, 'As much space as I can-cover in three strides.' The king agreed, and the god, falling the earth with his first step and the air with his second, took his third step on the king's head and drove him into the bottomless pit. On Vaman's Day old Prabhu women fast and give Brahmans money presents.

Some Prabhus keep the day before All Hallows Day, that is the bright-fourteenth of *Bhadrapad* or August-September in honour of Anant or Vishnu. If a Prabhu by chance finds a silk string with fourteen knots he takes it home and lays it by. [The string worshipped by Prabhu women has one line with fourteen knots; those worshipped by men have two or three lines with the same number of knots as the women's.] On the

fourteenth of *Bhadrapad* with his whole family he fasts, and in the evening places on a raised stool two metal pots filled with cold water, representing the holy rivers Ganga and Jamna, and covering the water-pots with a metal plate, he lays in the plate a snake made of the sacred *darba* grass, and close by a string called *anant-dora* with fourteen bead-like round moveable knots, the whole generally worked with gold and silver lace. Then with the help of the priest he worships the gods Anant and Shesh, and the goddesses Ganga and Jamna, offering them fourteen kinds of flowers, leaves, fruits, and sweetmeats, and ending with a feast in honour of Vishnu. The thread is either worn or laid by for a year. At the end of the year a new thread is bought and worshipped and the old one is made over to the priest. The worship of this thread should be kept up for over fourteen years and should then cease. The practice is observed both by men and women, and begins only when a chance thread is found.

Pitripaksha.

A day after Anant's Day, the second of the dark half of the month of Bhadrapad or August-September called Pitripaksha or the Spirits' Fortnight is sacred to the spirits of ancestors. In the name of each ancestor, both men and women, funeral rites or shraddh are 'performed on the day corresponding to the day of death. The ninth day known as avidhva-navmi, is kept for rites in honour of unwidowed mothers. And on the fourteenth day there is an All Hallows No-moon or sarvapitriamavasya, for any ancestors whose worship may have been left out. The shraddh is generally performed by the head of each family at midday on the ground-floor of the house. The object of the rite is to improve the ancestors' state in the spirit world. When the rite is over dishes of rice, milk, and sweetmeats are left on the tiles for the crows to feed on, and a rich dinner with spiced milk is given to relations and friends.

Navratra.

A day or two after All Hallows are sacred to Durga the wife of Shiv. The first nine are known as the *Navratra* or nine nights, and the last as the *Dasara* or tenth. Some Prabhus fast during the nine days, living on fruits and roots. On the ninth the goddess Durga is worshipped, a sacred fire is lit, and fed with firewood and butter. During these days married women of the Konkan Vadval or oartkeeper caste with a hollow dried gourd wrapped in cloth hanging from their right arm, beg in Bhavani's name from house to house. Each day they are given a handful of rice and on one of the nine days an elderly married woman

of each household worships the hollow gourd. A Vadval woman and her husband are called; a quarts square is drawn, and the hollow gourd placed in it on a low stool. The worshipper rubs the outside of the gourd with turmeric and redpowder and a few grains of rice, fastens a spangle on it, and filling it with rice waves a lighted lamp before it. The Vadval's wife rubs her own hands with turmeric powder and fastens on her brow redpowder and a spangle, and before her and her gourd the worshipper waves a lighted lamp. The Vadval man is given some rice and oil, and blessing the worshipper, he blows the conch shell. Only on this day does a Prabhu allow a conch-shell to be blown in his house. At any other time the sound of the conch is supposed to blow everything out of a Prabhu's house.] Married and unmarried girls and women go to one another's houses during these nine days. Seated on mats spread in the women's hall, their arms are rubbed with turmeric powder; their brows adorned with redpowder and glass spangles; their heads crowned with flowers, and their laps filled with parched rice, betelnut and leaves, and a few copper coins. [Some of these girls collect during these nine days one to two rupees at the rate of two or three pies ($\frac{1}{4}d$. - $\frac{3}{8}d$.) from each house. The Poona Prabhus have given up this ceremony. It is still observed in Bombay.]

Durga's Tenth Dasara.

Early in the morning of the tenth or *Dasara*, the day on which Durga slew the monster Mahishasur, Prabhus bathe and worship their house gods. In front of the house the women trace a quarts square [From this day, in different coloured powders, Prabhu women begin to trace pictures of trees and houses on the ground in front of their doors. They go on making these drawings for about six weeks. and in honour of the five Pandays set five cowdung balls on a leaf in the middle of the square and sprinkle flowers and redpowder or quial over the balls. Those who own a horse have him brought in front of the house. Garlands of bachelor's button-flowers are thrown round his neck and tied round his feet, a shawl is laid on his back, and a married woman, coming out of the house holding a plate with a lighted lamp, a cocoanut, sugar-cake, redpowder, a few grains of rice, betelnut and leaves, and a silver coin, rubs his forehead with redpowder and rice, gives him sugar to eat, and laying the betelnut, leaves, cocoanut and silver coin at his forefeet waves a lighted lamp before his face. [It is said that the horse-loving Arjun washed his horses' feet, threw garlands of flowers round their necks, and patted them.]

Besides the coin offered to his horse, the groom gets a few shillings and a turban or a suit of clothes. In the evening, after a hearty meal of mutton and sweetmeats, Prabhus take their children and carrying branches of the apta tree Bauhinia racemosa, go to Devi's temple and offer her apta or shami Mimosa suma leaves and a copper coin. On this day apta leaves are called gold apparently because on this day their power to scare spirits is as great as the spirit-scaring power of gold.] They then go visiting their friends and relations, greet each other, and offer an apta leaf and embrace. On this day if a Brahman and a Prabhu meet they exchange leaves and the Prabhu bows to the Brahman and gives him $\frac{3}{4}d$, to 1s. $(\frac{1}{2}-8 \text{ as.})$ On his return home, his wife, standing in the doorway or seating her husband in the house on a low stool, touches his brow with red-powder and rice, and giving him sugar to eat and laying a cocoanut in his hands waves a lighted lamp before his face. The husband drops 4s. to £1 (Rs. 2-10) in the plate, and washing his hands and feet sets a stool close to the house gods, and on the stool lays a sword, a gun, [Prabhus worship the sword and gun as they claim Khsatriya descent. a sheet of paper with carefully written sentences in English Marathi and as many other languages as he knows, a pen, a ruler, a penknife, and inkpot and sacred books. He touches these with sandal and redpowder, lays on each an apta and a shami leaf, and asks them to keep his house safe during the year.

Kojagari Pornima.

Abut five days after *Dasara* generally in *Ashvin* or September October comes the *Kojagari Pornima* feast. About eight in the evening Parvati Shiv's wife is worshipped. A supper is eaten of rice cooked in milk and sugar, and gram-flour cakes mixed with plantains, onions, brinjals, and potatoes and boiled either in butter or oil, and after supper men and women play chess till midnight. [People play chess on this night in the hope that Parvati will bring them cartloads of treasure.] A. week later comes the *Athvinda* or eighth day feast, when a servant draws a line of ashes, and lays castor-oil leaves on the veranda and other parts of the house.

Divali.

This and the *Khojagari* festival in the week before lead to the great feast of *Divali*. This, the lamp or *diva* feast, in honour of the goddess Lakshmi and of Vishnu's victory over the demon Sariki, lasts four days, the two last days of *Ashvin* or September-October and the two first days of *Kartik* or October-November. The day before the feast large metal water-pots are filled and placed in the house. An elderly woman,

taking an aghada Achyranthes aspera plant, cuts from it six one-inch pieces, and as many more as there are persons in the house including servants. These pieces she lays in a round bamboo basket, and near them the cut fruit of the *chirhati* creeper. She takes a castor-oil leaf, lays in it the bark of a plant called takla, used both for food and as a drug, and a few blades of fine grass, and folding the leaf lays it in the bamboo basket. In this way she prepares a packet for each of the household. Then taking a metal plate she makes as many rice-flour lamps as she has made packets, and putting two wicks and oil in each, dusts its rim in three places with redpowder and places the plate close to the bamboo basket. She then makes an extra rice-flour lamp and placing it by the house wall lights it in honour of the god Yam. She washes her hands and in another dish makes ready another five-wick lamp, and, with a cocoanut, a few rice grains, and a box of redpowder, lays it in the plate. Lastly she fills cups with sweet smelling spices, oil, and cocoa-milk. Then, as Vishnu promised him, in Narkasur's honour every nook and corner of the house is lighted. Till eight or nine at night children let off firework and then all feast on sweetmeats and other dainties. Next morning a married woman rises about three and drawing a square in the entrance room, places a low stool in the square and close to the stool sets the cups of spices and scented oil, and, on each side of the stool, sets a lighted brass lamp. The head of the house sits on the stool and the barber or some house servant rubs him with rice flour, spices, and oil, and his top-knot with cocoanut milk. He next sits facing the east on a high wooden stool in a squaretraced in the yard in front of the house-door and bathes, and putting on a waist cloth and turban stands in front of the house door. As he stands his wife or some other married woman of the family takes the five-wick lamp and a flour-lamp, places the flour-lamp at one side of the doorway, and marking his brow with redpowder and a few grains of rice, hands him a cocoanut, and waves the lighted lamp before his face. He gives back the cocoanut, touches the flour, lamp with the toe of his left foot, and enters the house. This is done in memory of Vishnu's fight with the giant Narkasur. After killing the giant, Vishnu entered the city early in the morning. The people lighting up the city, received him with great joy, the women going out to meet him and waving lighted lamps before his face.] After the head of the house, the other men of the family bathe in turn, and when all are bathed feast on sweetmeats. Then they worship the house gods, dress in rich clothes, and either go visiting or sit on the veranda talking. The married women dine at noon, and sit tracing drawings before the house door, while an old woman makes ready sixteen lights and sets them on a high stool. At dusk an elderly married woman sets the stool with its sixteen lights in the middle of the square drawn in front of the

house. To make these sixteen lights, two one-inch pieces of *nilgut* are taken and about half an inch on the top is hollowed and tilled with oil and wicks. Then placing near the stool a cocoanut, betelnut and leaves, a plantain, a sugar ball, and a copper coin, she bows to the lights and walks into the house. As the people of the house gather round the lamps, letting off fireworks and making merry, one of the servants takes a light from the stool and carrying it hid in his hands, goes to a neigh hour's house and tries without being seen to place his master's light among their lights, saying, as he lays it down, 'Take this son in-law, javai ghya.' Other servants are on the look-out for him and as he steals in, try without putting out his light to duck him with water. In this merrymaking and in letting off fireworks two hours are spent. Then the high stool is taken into the house with as many of the lights as are left on it. On the second day nothing special is done except bathing in the morning in front of the house. In the evening the head of the family worships Lakshmi the goddess of wealth. On the third day, a servant rises a one in the morning sweeps the house, and, gathering the sweepings into a bamboo basket, lays on the basket an old broom, a light, some betel, an four copper coins, and waving the basket in front of each room, says Idapida javo Baliche raj yevo, 'May evils go and Bali's kingdom come.' While the servant says this, a woman walks behind him as far as the house door, beating a winnowing fan with a stick and urging the servant to keep saying the verse without stopping. She drives him to the house door telling him not to look back, and he goes out, lays the sweepings by the roadside, and brings back the coin. He then rubs himself with oil, and without touching any one bathes in warm water. When the servant's bath is over the house, people bathe one after another. Then, as Vishnu promised, the head of the house takes a metal image of king Bali on horseback, dresses it and sets it on a high stool with twenty-one brass lamps round it. When Vishnu in the form of the dwarf Vaman stamped king Bali into hell, he promised that once a year his followers would worship the king. The story of Vaman and Bali is given at p. 249.] At dawn he sets the god in front of the house, and the household let off fireworks, play games of chance, and give money to Brahmans and other beggars who swarm in front of their houses. The last of the Divali days is Yamadvitiya or Yam's Second or Bhaubij also called the Brother's Second. On this day Yam, the lord of death, came to see his sister the river Jamna, and she won from him the promise that no man who on this day goes to his sister's house and gives and gets presents will he cast into hell. So on this day Prabhus go to their sisters' houses. The sister draws a square of quartz-powder lines, seats her brother in the square on a low stool, and waves a lighted lamp before his face. He gives her 2s. to £ 1 (Rs.1-10) and she gives him a

waistcloth and a rich dinner of milk and sweetmeats.

Basil Wedding.

Nine days after Yam's Second, on the bright eleventh of *Kartik* generally in October, a day is kept in honour of the marriage of the holy basil or *tulsi* with the god Vishnu. The head of the house fasts in the early part of the day. At noon the basil-pot is coloured red and yellow and a square of quartz powder is drawn round it. After breaking his fast the head of the house, with the help of the family priest, worships the basil and an image of Vishnu. Then, with Vishnu's image in his hands, he stands in front of the plant, a shawl is drawn between the image and the plant and held by two married men, the priest repeating verses, and the house people, both men and women, at the end of each verse throwing grains of rice over the plant and the image. When the verses are done, the curtain is dropped, the guests clap their hands, the image is set in the flowerpot in front of the plant, fireworks are let off, sugarcane is handed round, and 1s. to 2s. (8 as.-Re. 1) are presented to the priest.

Lamp Full-Moon.

Four days after the Basil-wedding on the bright fifteenth of *Kartik* or October-November comes *Dip-purnima* or the Lamp Full-Moon. On this day, in honour of Shiv's victory over the giant Tripurasur, Prabhu women present Brahmans with fruit, money, and lighted lamps, either silver lamps with gold wicks, brass lamps with silver wicks, or clay lamps with cotton wicks. [This demon, the lord of a golden a silver and an iron city, is said to have grown so mighty that beating almost all the gods he drove them out of their palaces. The gods crowded round Shiv and he, pitying their case, made the earth his car, the sun and moon its wheels, the Himalaya mountains his bow, Vasuki the serpent king his bowstring, and Vishnu his quiver. Thus armed, after a furious struggle, Shiv destroyed the mighty giant.] In the evening they fill the holes in the lamp-pillars or *dipmals* with lights, and soaking wicks in butter lay them in earthen pots, pierced with holes, light them and send them floating over the temple pond.

Makarsankrant.

On the twelfth of January, a solar festival and therefore on an uncertain day in *Paush* comes the *Makarsankrant* that is the passage of the Sun into the sign of the Crocodile or Capricorn, the day when the sun's course turns northward. In honour of the sun's return devout

Hindus make great rejoicings. From this day begin the six lucky northing or *uttarayani* mouths when light is large and heaven's gates are open, and when marriages should be held, and youths girt with the sacred thread. These are followed by the six spirit-haunted southing or *dakshanayani* months, when the days creep in and heaven's gates are shut, and the spirits of the dead have to wait without till

Makarsankrant comes again. The Prabhus both men and women rise early, rub themselves with sesamum oil, bathe in warm water, worship the family gods, and present Brahmans with sesamum seed, money, clothes, pots, umbrellas, and even lands and houses. In the afternoon they feast on sweetmeats and in the evening dress in new clothes and taking packets of sesamum seed mixed with different coloured sugar, give them to their friends and relations, saying: 'Take the sesamum seed and speak sweetly'. [The Marathi runs; Tilsa ghya, godsa bola.] Next day is an unlucky or kar day. On it married women bathe, and, dressing in rich clothes, deck their heads with flowers, and make merry going to their parents' houses and speaking no unkind word. As they do this day, so will they do all the year. She who beats her children will go on ill-using them, she who weeps is entering on a year of sorrow.

Shiv's Night.

About two weeks after the *Makrasankrant* on the bright fourteenth of *Magh* or January-February conies Shiv's great fourteenth or the *Mahashivaratri*. A wicked archer hunting in the forest followed a deer till night fell. To save himself from wild beasts he climbed a *bel* tree Ægle marmelos, and to keep himself awake kept plucking its leaves. By chance at the tree-foot was a shrine of Mahadev and the leaves falling on his shrine so pleased the god that he carried the hunter to heaven. Prabhus keep this day as a fast. In the evening they worship Shiv and in the hope of gaining the hunter's reward lay a thousand *bel* leaves on the *ling*. After worship they eat fruit and roots and drink milk, and, that they may not sleep, either read sacred books or play chess, a favourite game with both Shiv and his wife. Shiv's temples are lighted and alms are given to begging Brahmans and others.

Holi.

About three days after the *Mahashivaratra* and fifteen before the full-moon of *Falgun* or February-March begins *Holi* or *Shimga*, apparently the opening feast of the husbandman's new year of work. On the first day little boys dig a pit in the middle of the street or yard and, beating drums and shouting the names of the organs of generation, go from house to house begging firewood. At night they burn the wood in the

pit crying out and beating their mouths. This goes on for fifteen nights, and each night for three or four hours. On the eleventh night, dressed in white clothes, they go to the house of their high priest or to one of Vishnu's temples where red-coloured water is thrown over them. From this time till the full-moon the festival is at its height Young and old men shouting the names of the organs of generation, rub redpowder on each other's clothes and faces. On the last or full-moon day, in the afternoon, after feasting on mutton and sweetmeats, a plantain tree is set in the pit and heavy logs of wood are piled round it. About eight at night each householder who lives in the street with his family priest worships the pit, and gives sweetmeats. When this is over one of them takes a brand and, lighting the pile, which is called holi, shouts' the names of the male and female organs of generation and beats his mouth. Next day is the dust or dhul day, when people go about in bands throwing dust and filth. At night men go to each other's houses and the head of the house marks the guests' brows with sweetscented powder or abir, and gives them milk, coffee, fruit, and sweatmeats. Women have parties of their own, where dressed in white robes and green bodices, their heads decked with flowers and their brows marked with sweet-scented powder, they treat one another to fruit, coffee, and milk.

Eclipses.

Eclipses or grahans caused by the giant Rahu swallowing the sun, or the giant Ketu swallowing the moon, are thought to foretell evil. Of the beginning of eclipses the story is that when Dhanvantra brought nectar from the churned ocean, the giants hoped to keep it to themselves. Seeing this, Vishnu, taking the form of Mohani, a handsome woman, ranged the gods on one side and the giants on the other. Struck with the woman's beauty, the giants sat at a distance from the gods waiting for the drink. When the woman began to give the nectar to the gods, Rahu slipt between the sun and the moon, and gaining a share drank it off. Mohani with her discus cut Rahu in two, the body being called Rahu and the head Ketu. The rest of the giants attacked the gods, but after a hard fight were beaten. In a solar eclipse twelve hours and in a lunar eclipse nine hours before any change is visible the influence or vedh of the eclipse begins. From this time Prabhus may neither eat nor drink; the water-pots have to be emptied and cooked food thrown away. The place swarms with evil spirits. An eclipse is the best time for using a charm or a spell, and mediums, sorcerers, and jugglers are busy repeating spells on river-banks and in waste places. To keep the giants from entering the house, blades of holy or darbha grass are laid on pickle-jars and wafer-biscuits and tied in the skirts of clothes. When

the eclipse begins, Prabhus give rice, parched grain, old clothes, and money to Mhars and Mangs who go about carrying large bamboo baskets and shout, *De dan sute giran*, that is ' Give gifts and free the planet'. When the eclipse is over every Prabhu bathes, the cook-room is fresh cowdunged, cooking pots and pans are washed, jars are filled with fresh water, and fresh food is cooked and eaten.

Patane Prabhus have no headmen and no caste council. They are a prosperous and well-to-do class. Their monopoly of English clerkship has broken down, but they are pushing and successful as doctors, lawyers, engineers, and in the higher branches of Governments service.

VELALIS.

Vela'lis are returned as numbering 423 and as found in Khed and Maval, and in Poona city and cantonment. They say they are Vaishyas, and that they came to the district from Trichinopoly and Tanjor about seventy years ago to earn a living. They are divided into Pilles and Mudliars who eat together but do not intermarry. [Mudliar seems to be the Kanarese name for the Tamil people, the word meaning south-east men. Similarly they call the Telugu people Badages or northmen.] The following particulars belong to the Pilles. They are divided into Soliyavelali, Khudkyavelali, Mothevelalan, and Karikatvelalan, of whom the first three eat together and the first two intermarry. The Karikatvelalans do not eat, or marry with the other three clans as they consider themselves of higher rank, and unlike the rest do not eat fish or flesh or drink liquor. The names in common use among men are, Chimnaya, Devraj, Mutkarji, Periana, and Ramasvami, the title pille being added to each name as Devrajpille and Chinayapille. The names in common use among women are, Kamakshi, Minakshi Mariai, Murkai, Punama, and Virai. They are dusky coloured of various hues of brown. They are stoutly and gracefully made with jet black hair. Their home tongue is Tamil, but out of doors they speak Marathi. They live in houses of the better sort, one or two storeys high, with walls of brick and tiled roofs. They keep cows, buffaloes, and she-goats, and have copper and brass vessels, cots, bedding, carpets, pillows, boxes, stools, and tables and chairs. They are not great eaters, and are fond of sour dishes and of tamarind. Their staple food is rice, millet, wheat, pulse, vegetables, butter, spices, fish, and mutton. They eat hare,

deer, ducks, and domestic fowls, but not beef or pork. They drink both, country and English liquors, and smoke tobacco. They give dinners at marriages and on death anniversaries, when wheat cakes and sweet milk are prepared costing £2 10s. (Rs. 25) for a hundred guests. The men wear a waist cloth, coat, waistcoat, and shouldercloth, and fold a kerchiefs or rumal round the head. The women wear a bodice with a back, and the skirt of the robe hanging like a petticoat without being drawn back between the feet. The men wear the top-knot, mustache and whiskers, but not the beard; and the women tie the hair in a knot behind the head. They have rich clothes in store for special occasions worth £5 to £50 (Rs. 50-500). The ornaments worn by women are gold earrings called kamalos worth £2 10s. to £10 (Rs. 25-100), the gold and pearl nose-ring called nath worth £2 10s to £20 (Rs. 25-200), the gold necklace- called adigi worth £5 to £10 (Rs.50-100), and the gold or gilt bracelets called patlis, worth £2 to £5 (Rs. 20-50). The men wear the gold earrings called kadkans worth £1 10s. to £10 (Rs. 15-100), and those called murugus worth 10s. to £10 (Rs. 5-100). They are a hardworking, vigorous, and talkative people, clean, neat, sober, even-tempered, orderly, and hospitable almost to extravagance. They are husbandmen, trade shopkeepers, and brokers; the commissariat department is full of them. They say they are Vaishyas and higher than Mudliars with whom in their native country they do not eat. In Poona the two classes eat together but do not intermarry. A family of five living in fair comfort spend about £2 (Rs. 20) a month on food and £2 10s. to £10 (Rs. 25-100) a year on clothes. A house costs £30 to £100 (Rs.300-1000) to build and 3s. to 8s. (Rs.1½-4)a month to rent; their house goods vary in value from £2 10s. to £20 (Rs. 25,200), and they have servants on monthly wages of 4s. to 8s. (Rs. 2-4). A birth costs £2 10s, to £5 (Rs. 25-50), a hair-clipping or javal £2 10s, to £10 (Rs. 25-100), a teaching or palikudamvakya £2 10s. to £5 (Rs.25-50), a thread-girding or talapakalyanam £5 to £15(Rs.50-150), a boy's marriage £20 to £50 (Rs.200-500), a girl's marriage £10 to £20 (Rs.100-200), and a death £5 to £10 (Rs. 50-100). They are Smarts and their chief object of worship is Mahadev. Their family god is Kamathshama of Madras and Mariama of Trichinopoly. Their family priests are Shaiv Tailang Brahmans. They have house images of Mahadev, Vishnu, Ganpati, Krishna, and Surya Narayan, and go on pilgrimage to Benares, Madhura near Travankor, Rameshvar, and the Trivanna mountains near Madras. They fast on the Shivaratras or dark fourteenths, on *Pradoshs* or dark thirteenths, on *Ekadashis* or elevenths, and on all Mondays. Their holidays are Sankrant in January, Holi in March, Varshabhya or New Year's Day in April, Nagarpanchmi in August, Ganesh-chaturthi in September, Dasara in October, and Divali

in November. Their women are impure for ten days after child-birth. On the fifth day they worship the knife with which the child's navel cord was cut, setting before it flowers, eggs, mutton, and plantains. On the tenth day the child is laid in a cradle and named by an elderly woman of the house. The *mudi* or hair-clipping takes place at any suitable time before the child is three years old. In the morning they go to a garden some distance from the house, cowdung a spot of ground, and raise a canopy of sugarcanes, and set a plantain tree at each corner of the sugarcane canopy. They take two pebbles in honour of the goddess Kamakshiama, daub them with redlead, and place them inside the canopy. They break twenty-five to fifty cocoanuts, and place them in front of the goddess together with fifty sugarcanes and fifty plantains. A goat is killed, and the child lying on its maternal uncle's knee has its hair clipped by a barber who retires with a present of uncooked food and 6d. (4 as.) in cash. The hair is gathered, shown to the goddess, and thrown into a river or pond. A feast is held, and, after presenting the child with clothes and money, the articles offered to the goddess are handed to the guests who retire to their homes. If the child is a boy, when it is five years old, the ceremony of teaching or palikudamvakya, is performed. A Brahman, teacher is called, and friends and relations are invited. The boy is seated in the middle of the quests, a turmeric image of Ganpati is made and placed in front of the boy on a low wooden stool, and he worships it, the priest repeating verses. A pair of waistcloths and some money are given to the Brahman teacher. The boy makes a low bow before him and he teaches the boy to repeat a few letters. Sweetmeats are served and the quests withdraw, unless the boy's parents are well off when they feast the guests before they leave. When a boy is ten to fourteen years old the thread-girding or talapakalyanam takes place. A sacrificial fire or hom is kindled and the boy is dressed in new clothes and seated on a wooden stool in front of the fire. A sacred thread of cotton silver or gold is put round. his neck, money is handed to Brahmans, and they withdraw. The other quests are treated to a feast. They marry their girls before they come of age and their boys before they are twenty. A betrothal ceremony precedes marriage. In the morning the boy's father lays flowers close to a new robe and bodice, sprinkles red-powder over them, burns frankincense, and with a party of relations and friends and music goes to the girl's house. He carries with him plates filled with twenty-five to fifty cocoanuts, a bundle of sugarcanes, one hundred to two hundred plantains, the robe and bodice worth about £2 10s. (Rs. 25), and jewelry worth £10 to £50 (Rs. 100-500). When the party reach the girl's house she is dressed in the bodice and robe, her brow is marked with red and turmeric powder, ornaments are put on her body, flower garlands are hung

round her neck, and the sugarcanes and cocoanuts are presented to her. The girl's mother approaches the boy's mother, and throwing a flower garland round her neck, says, ' I have given my daughter in marriage to your son.' The boy's mother says to the girl's mother,' I have given my son in marriage to your daughter and your son is to me as a son-in-law.' The betrothal ends with a dinner. Twice during each of the next three days parties of the boy's people go to the girl's house and of the girl's people to the boy's house, and at their homes rub the boy and the girl with a mixture of turmeric, gram flour, and oil. The day before the wedding at the boy's house a marriage hall is built and a lucky post is planted under which are laid a pearl, a piece of coral, and a bit of precious stone, together worth about 1s. 6d. (12 as.); to the top of the lucky post a handful of darbha grass is tied. In the marriage hall clay figures of a horse, a lion, and an elephant are piled one above the other, and over them three empty earthen jars one above another. This is their marriage god or devak. Close to the marriage god is set a wooden mortar and over the mortar an earthen lamp with water and oil covered with another broken jar. An earthen altar raised close by and four plantain posts are fixed one at each corner. On the marriage day, generally in the morning, the girl's parents taking the girl in a palanguin with music and accompanied by male and female relations and friends, go to the boy's house. Before they enter the marriage hall, one of the boy's female relations comes with a plate of water and a mixture of turmeric powder and lime, waves it round the girl's head, and throws it away. Another woman comes with a lighted dough lamp and waves it round the girl's head, and the girl walks in, and is given sugared milk to drink and a plantain to eat. The boy sits on the altar on a wooden stool and the girl is seated on a second stool to the boy's left. In front of them, in honour of Ganpati, a water-pot is set and a cocoanut is placed on its mouth and worshipped. The cocoanut is broken in two. In one of the pieces the lucky gold button necklace or mangalsutra is laid and sprinkled with flowers. It is laid in a plate and taken before each quest who bows to it, and when all have saluted it the boy fastens it round the girl's neck. A sacrificial fire is lit in front of the boy and girl, and about twenty pounds of rice and cocoanuts are placed near them. Elderly men approach, fill their hands with rice, and throw the rice on the heads of the boy and girl. They wave cocoanuts round the heads of the boy and girl, break them, and throw them on one side as a present to the washerman. The couple change places, the hems of their garments are tied, and elderly women sing marriage songs, and at the end of each verse throw rice over the couple's heads. The boy catches the girl by her right little finger, and together they thrice go round the altar. An opening is made in the marriage hall towards the north, and the

boy pointing to a star asks the girl if she sees the star. She says, I see it. She is then seated on a plantain leaf over which about a pound of salt is spread and in front of her is laid a grindstone or pata. The boy catches the girl by both her feet and thrice sets them on the stone. The couple are then taken inside the house and are offered sugared milk and plantains. Lucky songs are sung by elderly women and when the songs are over, the boy retires and sits outside in the marriage hall with the men. Betel is served, and, except those who have been asked to dine, the guests withdraw. The priest also retires with a present of a pair of waistcloths and 2s. 6d. (Rs. 11/4) in cash. Next day the girl cooks a plate of rice and split pulse or khichadi in the marriage hall and serves it in five plates and offers it to the marriage gods, burning frankincense and breaking a cocoanut. A dinner is given, and, in the evening, the boy is seated on horseback and the girl in a palanguin or carriage and they are taken in procession to Maruti's temple and then home. When they reach the house a mixture of turmeric and water is waved round their heads and thrown on one side and the guests present the girl with 6d. to 2s. (Re. ¼-1) in cash. The booth is pulled down, and a mixture of water and parched grain is boiled and thrown on the boy and girl. They are then seated in a carriage and taken to the river to bathe. After their return a feast is given of a variety of dishes and the marriage ceremony is at an end. They allow child marriage and polygamy, but neither widow marriage nor polyandry. When a Velali is on the point of death a booth is raised outside near the front door of the house, and the floor of the booth is strewn with darbha grass and the dying person is bathed and laid on the grass. Ashes are rubbed on his brow and alms are given in his name. A couple of women break two cocoanuts in four pieces and placing them in a brass plate along with flowers and a dough lamp, go a little distance from the house, and setting the plate on the ground, look towards heaven and ask God to give the dying person a seat near him. The plate is then brought home and kept near the dying person's head. When life is gone the chief mourner, with four others, go with water-pots to a well and fetch water, a Jangam or Lingayat; priest walking in front of them blowing a conch shell. One of the house doors is taken off its hinges and laid on the ground outside the house, and the body is laid on the door and bathed with water from the well. It is dressed in new clothes, a turban, waistcloth, and coat, if it is a man; a robe and bodice if it is a married woman; and a robe alone if it is a widow. It is laid on a bamboo bier and covered with a shawl or silk waistcloth. Flowers, red and scented powder, and rosewater are sprinkled over the body. I. the dead is married and leaves a husband or a wife betel is placed in the hands and again taken back by the husband or wife and thrown away. After this the survivor may marry

again without angering the dead. The body is then raised on the shoulders of four men. In front walks the chief mourner with an earthen jar containing either burning cowdung cakes or live coal and beside him a Jangam or Lingayat priest blowing a conch shell. Parched grain is carried in a new winnowing fan and strewn as they walk till they reach the burning ground. When they have gone half-way the bier is laid on the ground, with the feet pointing south. A pound of rice and 2d. (1 2/3 anna) are given to a Mhar or Halalkhor, and the body is carried on to the burning ground. A pile of cowdung cakes is raised, the body is laid on the pile, and the bier is thrown on one side. The chief mourner's face is shaved including the mustache. He bathes, and with an earthen water vessel on his shoulder and a burning sandal log in his right hand thrice walks round the pile, and, standing with his face to the south and his back to the pile, dashes the jar on the ground and touches the pile with the burning sandalwood. Burning pieces of cowdung cakes are thrown round the pyre by the other mourners. The chief mourner is then taken to some distance from the pyre by two men who walk and seat themselves on either side of him. The rest of the mourners busy themselves with setting fire to the pyre. When it is half burnt, they give it in charge to the Mhar and go to where the chief mourner is sitting, and pay 6d. (4 as.) to the Jangam, 2s. 6d. (Rs. 1¼) to the Mhar, 2s. 6d. (Rs. 1¼) to the musicians if there are any, 6d. (4 as.) to the barber, and 6d. (4 as.) to the washerman. They then bathe in some stream or pool near the burning ground, each wearing a silk waistcloth or pitambar, and return to the mourner's house. Near the house door water is kept ready for the mourners to wash their hands and feet. When they have washed they enter the booth, where a lamp is kept burning on the spot where the dead breathed his last They look at the lamp and return to their homes. Such as are new relations stay with the mourners and dine with them, the food being brought by the mourner's maternal uncle. On the second day the chief mourner, accompanied by a few relations, goes to the burning ground with a cocoanut, a piece of sugarcane, plantains red and sweet scented powder, frankincense, camphor, flowers, oil milk, and *shikakai* pods, and throwing water over the ashes pick up the bones and makes them into a small heap. He sprinkle water over the bones, pours oil on them, drops shikakai and the red and sweet scented powders on them, lays plantains beside them breaks a cocoanut over them, and twisting a piece of sugar-cane lets a few drops of juice fall on them, and waves burning frankincense and camphor before them. He lays the bones in a earthen, jar, and taking the jar on his shoulder goes to the river and throws it into the water. He bathes and returns home. On the third day the chief mourner goes to the burning ground with a few near relations. They rub powdered

avalkati or pepper and milk on their bodies, bathe, and return to the house of mourning, where they dine on rice, vegetables, pulse, and butter. They then present the chief mourner with a turban, a coat, and a waistcloth, and in the evening take him to the temple of Ganpati or Mahadev, where he worships the god, breaks a cocoanut, and lighting camphor waves it before the god, bows, and returns home. On the night of the fifteenth they bring two new bricks and shape them like human beings, dress them, and lay them on a low wooden stool. A few of the deceased's clothes are washed and heaped in front of the images, and they are offered plantains, cocoanuts, parched rice or pohe, and frankincense is burnt before them. Female relations sit by weeping till next morning. On the morning of the sixteenth day the images and the offerings are tied in a bundle and placed in the hands of the chief mourner. He takes sixteen small and four large earthen jars, a handful of powdered coal, rice-flour, turmeric powder, brick powder, and green powder made of pounded leaves, oil, rice, salt, pulse, plantains, cocoanuts, and vegetables, and with a party of friends and Brahmans, goes to the river side or to the burning ground. Here the chief mourner is shaved and bathed, a new sacred thread is fastened round his neck, and he is dressed in fresh clothes. A platform of earth is made about eight feet square and at each corner one of the four earthen jars is set filled with water, and the sixteen small jars are also filled with water and arranged round the square. Mango leaves are laid in the mouth of each jar and a thread is passed round the necks of them all. The coloured powders are thrown over the platform. A miniature bamboo bier is prepared and two cloth dolls are made and laid on the bier, covered with dry leaves, and burnt. When the bier is consumed the chief mourner gathers the ashes and throws them into the river. He then bathes, sits near the square, and lights the sacrificial fire. The Tailang and other Maratha Brahmans are given uncooked food and money and retire, and the jars and other articles are thrown into the water. Presents of clothes are made to the chief mourner, and when the party returns to the house of mourning the friends dine and retire. They have no caste council. They do not remember having ever met to settle a social dispute. They Bend their children to school and are a rising class.

TRADERS

Traders include twelve classes with a strength of 20,736 or 2.44 per cent of the Hindu population. The details are:

POONA TRADERS.

| CLASS. | Males. | Females | Total. | CLASS. | Males. | Females | Total. |
|---------------------|--------|---------|--------|------------------|--------|---------|--------|
| Agarvals | 64 | 57 | 121 | Lohanas | 3 | 3 | 6 |
| Bangars | 20 | 13 | 33 | Tambolis | 26 | 20 | 46 |
| Bhatiyas | 40 | 27 | 67 | Vanis Gujarat | 2283 | 1511 | 3844 |
| Brahma- Kshatris | 32 | 31 | 63 | Marwar | 5889 | 3748 | 9637 |
| Kirads | 114 | 122 | 236 | Vaishya | 408 | 425 | 893 |
| Komtis | 229 | 200 | 429 | Total | 11,877 | 8859 | 20,786 |
| Lingayats | 2709 | 2852 | 5361 | | | | |

AGARVALS.

Agarva'ls are returned as numbering 121 and as found in Haveli, Maval, Sirur, Purandhar, and the city and cantonment of Poona. They claim descent from the sage Agarsen, whose seventeen sons married the seventeen daughters or *nagkanyas* of the serpent, Shesh. They have seventeen gotras or family stocks, of which the chief are Basal, Eran, Kasal, Garg, Goel, Mangal, and Mital. People of the same family stock or *gotra* cannot intermarry. They say that they originally came from Agra, and after living in Marwar for a time came to Poona about a hundred years ago. They are divided into Sache or pure Agarvals, Dasa and Visa Agarvals, and Maratha Agarvals who represent the illegitimate children of Sache Agarvals. The following details apply to the Sache. Dasa, and Visa Agarvals, who, though they neither eat together nor intermarry, differ little in religion or customs. The names in common use among men are, Ganpatlal, Girdharilal, Kanhailal, Narayandas, and Vithaldas; and among women, Bhagirthi, Ganga, Jamna, Lachhmi, and Rhai. They look like Marwar Vanis, are middlesized stout and fair, and their women are goodlooking. Their home tongue is Marwari, but most speak mixed Hindustani and Gujarati. They live in houses of the better sort, one or two storeys high, with walls of brick and tiled roofs. Their house goods include metal vessels, bedding carpets, pillows, and boxes, and they have servants whom they pay 6s. to 8s. (Rs. 3-4) a month. They are strict vegetarians, and of vegetables do not eat onions, garlic, carrots, or masur pulse. The men dress like Deccan Brahmans in a coat, waistcoat, waistcloth, shouldercloth, and Brahman turban or headscarf, and wear either a sacred thread or a necklace of tulsi beads. They wear a top-knot and

hair curling over each cheek, whiskers, and sometimes a beard. The women wear a bodice a petticoat and shoes, and muffle themselves from head to foot in a white sheet or chadar. They do not wear false hair or deck their heads with flower. They keep clothes in store. The women's ornaments are the gold hair ornament called *for* worth, 10s. (Rs. 5), the gold earrings called *jhube* worth £2 (Rs. 20), the gold and pearl nosering called *nath* worth £5 (Rs. 50), the glass and gold bead necklace called mangalsutra worth £2 (Rs. 20), the bracelets called bajubands worth £2 (Rs. 20), and glass and lac bangles, and the silver anklets called bichves worth £1 (Rs. 10) and kadis worth £3 to £4 (Rs.30-40). Except the gold and silver finger rings called angthia the men wear no ornaments. They are vegetarians, and their staple food is rich, pulse, vegetables, wheat, butter, and spices. Their marriage and death feasts cost them about 9d. (6 as.) a head. They are hardworking, even-tempered, orderly, and miserly. They are merchant, traders, grocers, moneychangers, moneylenders, dealers in cloth and grain, makers and sellers of sweetmeats, cultivators, and landholders. They say they do not earn more than £3 to a £5 (Rs. 30-50) a month. A family of five spend £2 (Rs. 20) a month on food. A house costs £50 to £150 (Rs. 500-1500) to buy and 10s. (Rs. 5) a month to rent. The house goods, including clothes, furniture, and jewelry, are almost never worth more than £100 (Rs. 1000). They spend £2 10s. to £5 (Rs. 25-50) a year on clothes. A birth costs £1 to £4 (Rs. 10-40); the first hair-cutting £5 (Rs. 50), a sacred thread or tulsi necklace-girding 10s. to £1 (Rs. 5-10), a boy's or girl's marriage £50 to £100 (Rs.500-1000), and a death £50 (Rs.500). They are a religious people and their chief object of worship is Balaji. Their priests are Marwari Brahmans or in their absence Deshasth Brahmans. They make pilgrimages to Pandharpur, Mathura, Nasik, Benares, Vrindavan, and Rameshvar. They fast on the two elevenths of every Hindu month, on Shivaratra in February, on Ram-navami in April, and on Gokulashtami in August; and feast on Holi in March, on Dasara in October, and on Divali in November. Their spiritual Teachers or *qurus* are either Ramanandis or Vallabhacharya Maharajas, to whom they show great respect. On the fifth day after a child is born they worship a mask or tak of the goddess Satvai which they place on a high wooden stool on wheat and arrange lemons round it. Children are named when they are a month old. At the naming ceremony four boys stand with a piece of cloth held on all four sides of the child and the child's paternal aunt names it. The aunt is presented with a bodice if the child is a girl and from 2s. to 10s. (Rs. 1-5) if the child is a boy, and the four boys are given pieces of dry cocoa-kerneland sixteen gram or bundi balls each. Eunuchs or hiides dance and sing in the evening and are paid 2s. 6d. (Rs. 11/4). They shave the child's head between its fourth and fifth year. When a

boy is eight or nine years old his parents take him to the spiritual Teacher or *guru* with music, relations, and friends, and a plate of betelnut and leaves, a cocoanut, flower garlands, nosegays, and 10s. (Rs. 5) in cash. The boy worships the Teacher or *guru*, offers him 10s. (Rs. 5), and falls before him. The Teacher or *guru* fastens a *tulsi* bead necklace round the boy's neck, whispers into his ears a sacred verse, and drops sugar into his mouth. They marry their girls between ten and twelve and their boys between fifteen and twenty. They do not allow widow marriage, and they burn their dead. They have no headman and settle social disputes at meetings of the castemen. They send their boys to school and are well-to-do.

BANGARS.

Bangars are returned as numbering thirty-three and as found in Poona city only. They say their origin is given in the Basvapuran, and that they came into the district about two hundred years ago. Whence and why they came they cannot tell, but some of their religious and social customs suggest that their former home was in the Bombay Karnatak. They have no subdivisions. Their surnames are Bhinkar, Buras, Jiresale, Khatavkar, Mhasurkar, phutane, Tambe, and Vaikar, and families bearing the same surname eat together but do not intermarry. The names in common use among men are Ganapa, Irapa, Khandapa, Morapa, Rakhmaji, Ramapa, and Rudrapa; and among women, Ganga. Lakshmi, Sita, and Yamuna. They look and speak like Marathas, and own stone and mud built houses with tiled roofs. Their household goods are metal and earthen vessels, bedding, carpets, and blankets; they keep no servants and own no cattle. They are vegetarians and their staple food is millet, split pulse, and vegetables. They eat rice twice a week on Saturdays and Mondays. The men dress like Brahmans in a coat, waistcoat, waistcloth, shouldercloth, and Brahman turban and shoes. They wear the *ling* and mark their brows with sandal and ashes. Their women dress in the full Maratha robe and bodice. They rub their brows with redpowder and do not use false hair, deck their heads with flowers, or care for gay colours. They are neat and clean, hardworking, frugal, hospitable, and orderly. They are shopkeepers and sellers of spices, turmeric, asafoatida, and dry cocoanut kernel, and hawk groundnuts, molasses, pulse, sweetmeats or chiki, and parched grain. Others serve as shopboys earning 10s. to 12s. (Rs. 5-6) a month without food. Their boys earn 4s. to 6s. (Rs. 2-3) a month as shopboys. A family of five spends 14s. to £1 (Rs. 7-10) a month on food, and about £1 10s. (Rs. 15)a year on clothes. A house costs about £10 (Rs. 100) to build and 6d. to 1s. (4-8 as.) a month to rent. Their house goods are not worth more than £5 (Rs.

50). A birth costs about 10s. (Rs.5), a boy's marriage £2 10s. to £7 10s. (Rs. 25-75), a girl's marriage £2 10s. to £5 (Rs.25 -50), and a death £1 (Rs.10). Their chief god is Mahadev and their priests are Jangams or Lingayat priests, who officiate at their births, marriages, and deaths. They make pilgrimages to Shrishailya Malikarjun in Signapur near Phaltan Bangars worship the goddess Satvai on the fifth day after a child is born. In the middle of a bamboo winnowing fan they place a handful of wheat, and on the wheat set a dough lamp which they feed with butter. They offer the lamp molasses wheat bread and *methi* or fenugreek, and ask it to be kindly. A feast to near relations and friends ends the day. On the seventh a Jangam is called, his feet are washed, and the water is drunk by the people of the house, and he presents the new-born child with a *lingam* laying it on the bed near the child's head. A present of 3d. (2 as.) satisfies the priest and he retires. On the twelfth evening the child is laid in the cradle, four dough lamps are lit under it, and five dough cakes are laid one on each corner of the cradle and the fifth under the child's pillow, and the child is named in the presence of female guests. Wet gram is presented to the guests and they retire except a few near relations who remain for dinner. They do not think their women unclean after child-birth, but they do not touch them during their monthly sickness. They do not mourn the dead and do not think that a death makes near relations impures. They marry their girls before they come of age and their boys before they are twenty-five. The boy's father has to look out for a wife for his son. When he has found a suitable match she is presented with the silver feet ornaments called sakhalyas and vales, worth about £4 (Rs. 40). A marriage paper or *lagnachiti* is prepared and made over to the boy's father. The boy and girl are rubbed with turmerics at their homes, the girl first and then the boy, and presented with clothes, the girl with a green robe and bodice and the boy with a shouldercloth and a turban. In the evening two earthen pitchers are brought and broken into two equal parts. They are marked with fantastic colours and decked with gold and silver tinsel. The upper part of the jar is turned upside down and on it the lower part is set and filled with ashes. In the ashes, three torches four or five inches high, soaked in oil, are stuck and lighted with camphor, Round the torches are set fifteen flags about a foot and a half high and the whole is lifted and waved round the house gods. This called the kuldharmachadip that is the family god's lamp. The boy and his mother dress in yellow silk, and taking the two broken jars on their heads go to the temple of the village Mahadev accompanied by kinsmen and kinswomen and with a conch shell and other music. At the temple the lamp of the family god is waved round Mahadev's face, a betel packet is laid in front of the god, and the torches are put out by breaking two cocoanuts and

pouring their water over the torches. The conch shell is brought back by a married couple the hems of whose robes are knotted together, and it is placed among the household gods as the marriage guardian or devak. This ceremony is repeated at the girl's house with the same details, except that instead of the boy's mother the girl's father takes the other jar upon his head. The day ends with a dinner. On the marriage evening the boy is seated on horseback and taken to the girl's house. On reaching the house, before he enters presents are exchanged, and rice, curds, and a cocoanut are waved round the boy's head. In the marriage porch he is made to stand face to face with the girl on a carpet and a cloth is held between them. Both a Jangam and a Brahman are present, and, after the marriage verse is repeated by the Brahman, the cloth is pulled on one side, grains of rice are thrown over their heads, and they are husband and wife. They are next seated facing each other on wheat with their maternal uncles standing behind them. In front of the boy five brass water-pots filled with cold water are placed, one at each corner of a square and the fifth in the middle, and with the help of the Jangam are worshipped by both the boy and the girl. A cotton thread is wound five times round the couple, cut in two, and one-half with a turmeric root is tied to the right wrist of the boy and the other half to the right wrist of the girl. The boy pours water from the middle water-pot over the girl's hands, and the hems of their garments are tied by the Jangam, who leads them before the conch shell or marriage guardian. They make a low bow and return, and the knot is untied by the Jangam. The Jangam and Brahman priests are then given betel packets and about 3s. (Rs. 1½) in cash and retire. Next day a married woman fills the girl's lap with five betel nuts and leaves, five dry dates, five turmeric roots, pieces of cocoakernel, and grains of rice, and she goes to her husband's house with him and his relations and friends and music. A feast at both houses ends the marriage. They allow widow marriage and polygamy, but not polyandry. They bury the dead. They carry the body sitting in a blanket bag or zoli with a Lingayat priest walking in front blowing a conch shell. They bury the body sitting with its face to the east and the ling which he wore round his neck in his left hand covered with his right. The chief mourner brings water in a conch shell, drops some into the dead mouth, lays a few bel leaves on the hand and in the mouth, and the mourners fill the grave with earth repeating Har, Har, Mahadev. After the grave is filled the Jangam stands over it, repeats texts, and sprinkles a few bel leaves, and the mourners retire. The caste is feasted on the third or the fifth day after the death, and every year a mind-feast or shraddh is performed. The Bangars have a headman whom they style shetya, who settles social disputes in

consultation with the men of the caste. They send their boys to school for a short time, They are a steady class.

BHATYAS.

Bha'tya's, or Bhati traders, are returned as numbering sixty-seven, and as found in Haveli, Bhimthadi, and Poona city. They have no subdivisions. They are short and sturdy with regular features. Their home speech is Gujarati, but with others they speak Marathi. Their usual food is rice, pulse, and butter in the morning, and rice bread in the evening. They are vegetarians and are careful to abstain from fish, flesh, or liquor. Except their special double-horned turban, the men's dress does not differ from that of high class Marathas; their women dress like Gujarati Vani women in a full petticoat, a short sleeved and open-backed bodice, and a robe or scarf which is drawn up from the back part of the waist of the petticoat across the face as almost to form a veil, and is fastened in front in the left waist be of the petticoat. Their petticoats and robes are generally of hand printed cloth darker and less gay than the Maratha women's robes. As a class they are hardworking, sober, thrifty, and hospitable. They trade in molasses and hirde or myrobalans, which they buy and send to Bombay. They worship the usual Brahmanic and local gods, but their chief objects of worship are Gopal, Krishna, and Mahadev. They are well-to-do.

BRAHMA-KSHATRIS.

Brahma-Kshatris are returned as numbering sixty-three and as found only in Poona city. They are said to have come into the district from Aurangabad about sixty years ago in search of work. They are also called Thakurs, or lords, a name which in the Deccan is applied to several classes who have or who claim a straight of Kshatriya blood. Among their surnames are Bighe, Nagarkar and Sakre, and among their family stocks or gotras are Bharadvaj and Kaushik. Sameness of stock but not sameness of surname is a bar to marriage. The names in common use among men are Aparao, Anandrao, and Lakshman; and among women Ambabai, Jankibai, and Sonabai. They are a fair people and look like Gujarat Brahmans. Their home speech is Marathi. They live in houses of the better class two or more storeys high with walls of brick and tiled roofs. Their houses are neat and clean, and they keep horses, cattle, and parrots. Their staple food is millet bread, vegetables, and spices. Their holiday dishes are pulse balls and sugared milk; a feast of these dishes costs about £4 (Rs. 40) for every hundred guests. They say they do not eat fish or flesh or drink liquor, and smoke nothing but tobacco. Both men and women dress like

Maratha Brahmans, and the women wear false hair and deck their heads with flowers. They are neat and clean, hospitable, and orderly. They are bankers, money-changers, moneylenders, railway contractors, writers, cloth-dealers, and husbandmen. The average monthly food charge for a family of five is about £2 (Rs:20). Their houses cost £50 to £500 (Rs. 500-5000) to build and 4s. to £1 (Rs. 2-10) a month to hire. Their furniture is worth £70 to £200 (Rs. 700-2000). Besides their food servants are paid 4s. to 8s. (Rs.2-4) a month. Their animals are worth £2 to £20 (Rs.20-200). They spend on clothes £3 to £20 (Rs. 30-200) a year. Their store of clothes is worth £5 to £50 (Rs.50-500), and their ornaments £250 to £500 (Rs. 2500-5000). A birth costs £1 10s. to £2 10s. (Rs.15-25), a hair-clipping £1 to £2 (Rs.10-20), a thread-girding £7 to £12 10s. (Rs.70-125), the marriage of a son £50 to £100 (Rs.500-1000), the marriage of a daughter £20 to £80 (Rs.200-800), a girl's coming of age £5 to £7 10s. (Rs.50-75), a pregnancy £2 to £3 (Rs. 20-30), and a death £6 to £7 (Rs. 60-70). They are religious, worshipping chiefly Mahadev and the Devi of Saptashringi hill about thirty miles north of Nasik. They employ Deshasth Brahmans as their priests and show them great respect. They worship the usual Brahmanic gods and goddesses, keep the regular fasts and feasts, and make pilgrimages to Alandi, Saptashring, and Benares. They believe in sorcery, witchcraft, soothsaying, and omens. When a child is born its navel cord is cut by a midwife and buried inside the house. On the fifth day they place a arindstone in the mother's room. A handful of wheat and a betelnut are laid on the stone and worshipped by one of the married women of the family. A dough lamp is set close by and the whole is left for twelve days in the mother's room. To each leg of the cot on which the mother and child are laid is tied a rod of iron as thick as a man's finger and they are left there ten days. The mother is held impure for ten days, when she is bathed and the cot is taken away. The house and part of the room is cowdunged and a fresh cot is laid for the mother and child. In the evening each of five Brahmans is presented with sweetmeats and a copper coin. On the twelfth day the grindstone is taken from the lying-in room and the child is named. Brahmans and married women are feasted, the chief dish being oil-cakes. The hairclipping takes place when the child is three months to two years old, when the barber buries the hair in some lonely spot and is given a meal of uncooked food and 6d. (4 as.). They gird their boys with the sacred thread when they are between six and ten, the details of the ceremony being the same as among Maratha Brahmans. They marry their girls before they are twelve and their boys before they are twenty-five. Except that the bridegroom wears a silk or a Cotton waistcloth, a coat, and a turban, the ceremony is the same as among

Deccan Brahmans. They burn their dead, mourn ten days, and end the mourning with a caste feast. Polygamy is practised and widow marriage forbidden. They have a caste council and settle social disputes at meetings of the castemen. They send their boys to school and are well-to-do.

KIRADS.

Kira'ds are returned as numbering 236, and as found in Poona city only. They are said to have come from Gwalior since the beginning of British rule. They have no subdivisions. Their surnames are Jaradya, Khojarvajar, Menduri, Parsaya, and Sujemiya; people bearing the same surname intermarry. The names in common use among men are Baliram, Banduram, Chandulal, Kisandas, and Kushaji; and among women Hirabai, jesibai, Lalubai, Munyabai, and Subhadrabai. They look like Pardeshi Brahmans. The men wear the top-knot and whiskers but not the beard, and the women wear the hair in a roll at the back of the head. The men mark their brows with sandal paste and the women draw a cross line of redpowder. Their home tongue is Hindustani, but out of doors they speak Marathi. They live in houses of the better sort, one or two storeys high, and have metal and earthen vessels and bullocks and carts. Their staple food is millet Bread, split pulse, and vegetables, and they are fond of pungent dishes. They eat fish, eggs, and the flesh of goats sheep and fowls, and drink liquor. They give feasts of curds and rice sweet cakes and wheat bread. The men dress like Marathas, and the women wear either a petticoat or a Maratha robe, drawing the skirt back between the feet, and a bodice. The women wear ornaments in their hair and on their ears, nose, neck, arms, and feet. They are hardworking, sober, thrifty, clean, and neat, but hot-tempered and fond of show. They are contractors, supplying hay, thatch, bullocks, and carts. Their women help by making thatch, grinding grain, and selling firewood and cowdung cakes. A house costs £20 to £50 (Rs. 200-500) to build and contains furniture and goods worth £5 to £50 (Rs. 50-500). They pay their servants 10s, to 18s. (Rs. 5-9) a month without food. A family of five spend £1 to £1 10s. (Rs. 10-15) a month on food, and £1 16s. to £2 10s. (Rs. 18-25) a year on clothes. A birth costs 2s. to 10s (Rs. 4-5), a hair-clipping 2s, to 4s. (Rs. 1-2), a boy's marriage £5 to £15 (Rs. 50-150), a girl's marriage £5 to £6 (Rs. 50-60) and a death £2 to £3 (Rs. 20-30). They are Brahmanic Hindus and worship goddesses or mothers more than gods and are termed devi-upasaks or goddess-worshippers. Their family deities are Bhavani of Tuljapur and Lakshmi-Narayan. Their priests all Kanoj Brahmans who officiate at their houses during marriages and deaths. They go on pilgrimage to Tuljapur, Pandharpur,

and Alandi. They believe in sorcery, witchcraft, soothsaying, and lucky and unlucky days. On the fifth day after the birth of a child they worship the goddess Satvai, and offer her brinjals or gajre, dry ginger, black pepper, split pulse or revdi, sweetmeats, dry bomalo fish, and dress the child in a coat and cap. On the twelfth the mother's impurity ends and her cot and clothes are washed. On the thirteenth they lay the child in a cradle and name it. They clip a child's hair when it is one to five years old outside of the house or in a garden. They marry their girls before they are fifteen and their boys before they are twenty-five. The boy's father looks for a girl for his son, and when one is found he sends some of his kinsmen to settle the match. After a couple of days the kinsmen bring back all that the girl's father will let them know of his wishes regarding the match. On the third day the boy's father goes to the girl's. If the girl's father seats him on a cot it is understood that he is willing to give his daughter; if the girl's father seats him on a mat the boy's father goes home. Next day if the match is settled the boy's and girl's fathers go to the priest's and are told lucky days for the marriage and turmeric rubbing. The days are noted on two pieces of paper, which are handed to the two father's who lay them before their house gods. A post is set up near the house and a bundle of hay is tied to its top. On the following day wheat cakes and balls called *gulgule*, are prepared and ten to fifty are sent to the houses of all caste people. On the third day the boy is rubbed with turmeric, and what remains is sent to the girl with a petticoat, bodice, and robe. On the fourth day, a four feet long mango staff is planted in the marriage hall and an earthen jar coloured red and white and filled with cold water is set near the staff. Two copper coins are laid in the jar, it is covered with an earthen lid, and a dough lamp is kept burning close by. Four holes are made in the staff and four lighted lamps or kodyas are kept burning in ladles and the whole is worshipped by the boy's maternal uncle. This is called the marriage god or devak. The boy is seated on a low wooden stool, is anointed with oil from head to foot, is rubbed with turmeric, and a marriage ornament of wild date or sindi palm is tied to his brow. He is seated on a horse and taken in company with children to the marriage porch which has been built at the girl's house. When he draws near the hall he waits without dismounting till the girl's father comes and presents him with a turban and sash, and he goes back to his house. On the fifth day the boy is made to stand at his house on a low wooden stool, and a thread is passed seven times round his body. A couple of leaf-plates are filled with rice and an iron ring is tied with the thread that was passed seven times round his body. This ceremony takes place with the same details at the girl's house. The boy is seated on a horse, and, accompanied by relations friends and music, is taken in procession to the girl's. He is

led to a neighbour's house where a feast is held, and after the dinner is over the guests withdraw leaving the boy and one or two of his relations. Early next day the quests return. Two low wooden stools are set in front of the marriage god or devak, and the boy is taken to the girl's house, and he and the girl are seated the girl on his right. The priest kindles a sacrificial fire in front of them and the boy feeds it with clarified butter and grain. The priest holds a cloth between the marriage guardian or devak and the boy and girl and repeats marriage verses. When the verses are ended, the girl followed by the boy takes six turns round the devak. Before beginning to take the seventh turn, the boy asks his parents and the other guests whether they should take the seventh turn. They say, 'Take the seventh turn'; and he walks in front of the girl, and when the turn is completed they are husband and wife. A feast is held. In the evening the boy and girl are seated in a palanguin or carriage and are taken to the boy's house. Before he enters the house the boy's sister stands in the doorway and asks him to give her two silver wristlets or kakne. boy hands her 4s. (Rs. 2) and she allows him to pass. On the following or seventh day the boy unlooses the girl's wristlet and the girl unlooses the boy's wristlet, and the marriage festivities end with a feast. When a girl comes of age, she is seated by herself for four days and on a lucky day her lap is filled with wheat and fruit. a person dies the family barber goes to tell the caste people. they come a bier is made, and, after water has been poured over the body where it lies in the house, it is brought out, laid on the bier, and carried to the burning ground on the shoulders of four men. When the body is half burnt the mourners bathe and go to the deceased's house, and the chief mourner standing before them asks their forgiveness for the trouble to which they have been put. The mourners reply, ' It is no trouble; we have helped you and you will help us,' and they retire. On the third day the chief mourner throws the ashes into water, and on the place where the body was burnt sets two earthen jars, one filled with water the other with milk, and after a bath returns home. The deceased's family mourns ten days. On the eleventh the men of the caste have their heads shaved at the chief mourner's house and a his expense, and after a feast they retire. On the thirteenth his near relations present the chief mourner with a turban and the mourner is free to attend to his business. They have a caste council who settle social disputes at meetings of the castemen. Offences against caste are punished by fines varying from 6d. to £1 (Rs. ¼-10), which are spent either on liquor or on a caste feast. The Kirads send their boys to school until they are able to read and write and cast accounts. They are a steady well-to-do class.

KOMTIS.

Komtis are returned as numbering 429 and as found over the whole district except in Maval. They are said to have come into the district fifty to seventy-five years ago from Telangan or the Nizam's country. They are of three divisions, Jains, Ryapols, and Vaishyas, who though they neither eat together nor intermarry differ little in appearance, speech, calling, or customs. They are dark, tall, and thin. Their home tongue is Telugu, but with others they speak Marathi. Many of them live in houses of the better sort two storeys high with walls of brick and tiled roofs. They are vegetarians and their staple food is millet, rice, pulse, and vegetables. Both men and women dress like Deccan Brahmans. As a class Komtis are hardworking, orderly, thrifty, and hospitable. Most of them are grocers, dealing in spices, grain, butter, oil, molasses, and sugar. A few are moneylenders, writers, husbandmen, and in Government service as messengers. They send their boys to school. [Fuller details of Komtis are given in the Sholapur Statistical Account.

LINGAYATS.

Linga'yats, or Ling Worshippers, are returned as numbering 5361 and as found over the whole district. They originally belonged to the Karnatak and are said to have come to the district about a hundred years ago. They have no subdivisions. Their surnames are Gadkar, Hingmire, Jire, Jiresal, Kale, Mitkar, Parmale, Phutane, Vaikar, and Virkar Families bearing the same surname do not intermarry. The names in common use among men are Mahadev Malikarjun, Shankar, and Virbhadra; and among women Bhagirthi, Bhima, Ganga, Girja, Parvati, and Uma. They are generally tall, thin, and dark. Their home tongue is Kanarese, but out of doors they speak Marathi as fluently as Marathas. They live in houses of the better class and have servants and cattle. Their staple food is millet, rice, pulse, and vegetable, and they neither eat flesh nor drink liquor. They do not allow strangers to see their food or the sun to shine on their drinking water, and they are very careful that no scraps of a meal shall be left uneaten. The men wear a waistcloth, coat, waistcoat, shouldercloth, headscarf or Brahman turban, and Brahman shoes. The women dress in the full Maratha robe and bodice, and both men and women mark their brows with ashes and carry the ling in a small box either tied to the upper left arm or hanging from the neck. They are thrifty, sober, hospitable, hardworking, and orderly. They are grain and cloth retail dealers, and peddlers, grocers, and spice sellers. They are Shaivs and have no images in their houses. If they pass any Hindu temple they bow to the

image thinking it to be Mahadev, and in the same way they bow before mosque or a church thinking every object of worship is Shiv. Their priests are Jangams, to whom they show great respect and before whom they bow low. They profess not to believe in sorcery, witchcraft, or soothsaying, or to consult oracles. When a young wife's first confinement draws near she is generally taken to her mother's. When a child is born the midwife cuts the navel cord and lays the child beside its mother in the cot. Word is sent to the child's father, and he distributes sugar and betel-packets among relations, friends, and neighbours. Either on the first, third, or fifth day a ling is tied round the mother's neck or laid under the child's bed or pillow. On the evening of the fifth day, in the lying-in room, near the cot a square is traced on the ground with rice flour or quartz powder, and in the square is laid the knife with which the child's navel string was cut, together with a blank sheet of paper and a pen, and these are bowed to as Satvai. On the evening of the sixth day a silver image of the goddess Parvati worth 34d. to 11/2d. (1/2.1 anna) is set on a low wooden stool, the midwife lays flowers, camphor, and frankincense before it, and the mother and child bow down to it. The Jangam comes and is seated on a low wooden stool. His feet are washed in a plate, and the water is sprinkled over the house, and given to the house people both men and women to drink. The priest retires with a dinner and a few coppers. They name their children, if a girl on the twelfth day and if a boy on the thirteenth. On the naming day five married women are asked to dine along with near kinsfolk and the child is laid in a cradle and named. Before beginning her house work the mother takes her child to a temple of Mahadev, bows to the god, and comes home. They feed a child on solid food for the first time after it is six months old. When it is a year old, if it is a girl, part of its forelock is clipped by its maternal uncle, and if it is a boy the head excepting the topknot is shaved by a barber. At five years old a boy is sent to school, and at twelve he is taught a sacred verse in honour of Shiv. Girls are also taught this verse, but not till they are sixteen. They marry their girls between eight and twelve and their boys between twelve and twentyfive. The offer of marriage comes from the boy's house, and when the match is settled the boy's father, accompanied by a Jangam and a few near relations, goes to the girl's, presents her with a new robe and bodice, and puts a little sugar into her mouth. The girl's father hands betel-packets and the guests withdraw. Afterwards, the marriage day is settled in consultation with a Jangam 'or a Brahman astrologer. Marriage porches are raised both at the boy's and at the girl's and an earthen altar is made at the girl's. Round the altar twenty whitewashed earthen pots marked with red lines are piled in five pillars each of four pots. The boy is seated on horseback, and with a

band of kinsmen and kinswomen and music goes to the girl's house. The boy and girl are rubbed with turmeric and the hems of their garments are knotted together and untied after the boy and girl have bowed before the god Mahadev. A guartz square is traced, and round it are arranged five metal water-pots filled with water. In the middle of the square two low wooden stools are set and the boy and girl take their seats on the stools. In front of them is set an image of Mahadev and of his carrier the bull Nandi, and these are worshipped with the help of the Jangam. The Jangam repeats the marriage verses and the guests keep throwing grains of rice over the heads of the boy and girl. When the verses are finished the boy and girl bow before Mahadev and Nandi and are man and wife. The boy and girl are seated on the altar and the girl's father presents the boy with a water-pot or tambya and a plate or pitali. A dinners follows and after dinner betel-packets are handed and the guests withdraw. Next day presents of clothes are exchanged, the boy goes in procession with his wife to his house, and the guests are given betel-packets and withdraw. When a Lingayat is on the point of death alms are given in his name. When he dies he is seated on a low wooden stool leaning against the wall and supported on each side by near kinspeople. A bamboo frame is built round is high wooden stool, a young plantain tree is tied to each corner of the stool, and a red cloth is folded on the three sides of the bamboo frames. The body is carried outside of the house, cold water is poures over it, and ashes are rubbed on the brow arms and chest. It is dressed in the usual clothes, and flower garlands are hung round the neck. A lighted lamp is waved round the face and the body is seated in the frame and carried on the shoulders of four mens. In front walks a Jangam with a conch shell and a bell, constantly ringing the bell and every now and then blowing the shell. Both men and women follow repeating Har, Har, Mahadev. When they reach the burial ground the frame is lowered, water is sprinkled on the ground which is to be the grave, a hole six feet deep in dug, and the body is lowered into the hole, and seated with the clothes on. The *ling* is untied from the neck, laid on the open hand and covered with bel leaves. As much salt as the mourners on afford is spread round the body and the grave is filled. A stone is laid over the grave, and on the stone the Jangam stands repeating verses. When the verses are ended bel leaves are thrown over the stone and the funeral party retire to the house of mourning and look at the burning lamp which was placed on the spot where the deal breathed his last. After they leave the lamp is allowed to go out They show no signs of mourning, but, if able to meet the expens raise a tomb with a ling and a bull carved on it. On the third day a feast is held. Nothing more is done till the yearly death-day when another feast is given. The Lingayats are bound together as a body, and settle

social disputes at meetings of the castemen consultation with the headmen or *shettia's*. They send their boy to school for a short time, and are in easy circumstances.

Loha'na's are returned as numbering six and as found only in Poona. They have come to Poona from Bombay, where they muster strong. Their home tongue is Gujarati, but they speak Marathi like Brahmans. They are, thrifty, hospitable, and hardworking. They are traders, moneylenders, and dealers in gunny-bags or *bardans*.

TAMBOLIS.

Ta'mbolis, or Betel-leafsellers, are returned as numbering forty-six and as found only in the city and cantonment of Poona. They say they came from Satara and Ahmadnagar during the time of the Peshwas and took to selling betel leaves from which they get their name. They eat and marry with Maratha Kunbis. Their surnames and the names of men and women are the same as those of cultivating Marathas, and, as among Marathas, persons bearing the same surname do not intermarry. They look speak dress and eat like Marathas. They resemble Marathas in religion and customs, and settle social disputes at meetings of the castemen. They are retail sellers of betel leaves, of apta Bauhina racemosa and temburni Diospyros melanoxylon cigarettes, of betelnut, of catechu, and of tobacco. They buy the betel leaves from Tirgul Brahmans who grow them in gardens. Between Magh or February and Jesht or June they buy a kudtan of thirty-seven kavlis, each kavli containing four hundred and fifty leaves, plucked from the tops of plants and worth 16s. to £1 6s. (Rs. 8-13) the kudtan. They sell twelve, fifteen, or twenty leaves for \%d. (\%anna). From June to October they buy a *kudtan* of *navatichis* or tender leaves and talpanes or short-bottom leaves at 4s. to 12s. (Rs. 2-6) the kudtan. Between October and February they buy a kudtan of gachis or middle leaves costing 14s. to 18s. (Rs.7-9) and sell them at twenty to twenty-five for %d. The ripe or pakha leaves are sold at eight to twelve for 3%d. The leaves have to be turned and aired every day and the ripe ones picked out. If not carefully picked and sifted the leaves rot. Tambolis make £1 to £1 10s. (Rs. 10-15) a month. Their women do not help. Lads begin to serve as shopboys on 10s. to 14s. (Rs. 5-7) a month. They do not send their boys to school, and are a steady class.

VANIS.

Va'nis or Traders, with a strength of 14,374, belong to three main divisions, Gujarat Vanis, Marwar Vanis, and Vaishya Vanis, who neither dine together nor intermarry.

Gujrat.

GUJARAT VANIS or traders, numbering 3844, are found over the whole district. They are said to have come from Gujarat in search of work at different times during the last two hundred years. They are divided into Meshris or Brahmanic Vanis, followers of the vaishnav pontiff Vallabhacharya, and Shravaks or followers of the Jain religion. Meshris are divided into Kapols, Khadayats, Lads, Modhs, Nagars, Panchas, and Porvals. They rank next to Brahmans and eat only from the Gujarat Brahmans who officiate as their priests. The Jains are divided into Humbads, Porvals, and Shrimalis. The following details apply both to Meshri and to Jain Vanis. [Besides the Gujarat and Marwar Shravaks or Jains, there are a few Kanarese jains who do not differ from the Jains described in the Sholapur Statistical Account. The names in common use among men are Ganpatdas, Lakhmidas, Manekchand, Narayandas, Raghunathdas, Ramdas, Shivchand, Shivdas, and Vithaldas [Meshri men's names end with das and Shravak men's names end with chand. I; and among women, Gulab, Godavari, Jadav, Jamna, Jasoda, Kaveri, Lakhmi, Manik, Radha, Rukhmini, and Reva. They nave neither surnames nor family stocks. The men add the word shet the Gujarati for merchant to their names. They speak. Gujarati at home and like the Vanis of Gujarat, from whom they do not differ in appearance, they are fair and inclined to stoutness. Most of them live in houses two or three storeys high, with stone and brick walls and tiled roofs. Their houses cost £100 to £1000, (Rs. 1000-10,000) to build and 16s. to £2 (Rs. 8-20) a month to hire. The value of their furniture and house goods varies from £100 to £1000 (Rs. 1000-10,000). The furniture of the riches families of Poona Vanis includes couches, sofas, boxes, chairs, tables, globes, looking glasses, Indian carpets, Persian carpets beds, pillows, cushions, large and small cooking and storing vessels and utensils, and useful and ornamental silver plates. Most of these employ servants to do the house work and pay them 8s. to l2s. (Rs. 4-6) a month. They keep cows, shebuffaloes, horses, and parrots. They are strict vegetarians and are famous for their fondness for sweet dishes. The daily meal includes four or five dishes, rice boiled and strained, split pulse turmeric powder and salt called varan, unleavened wheat cakes called polis, and vegetable. A family of five spends £1 10s. to £2 10s. (Rs. 15-25) a month on food. They give caste feasts on marriage and other occasions the chief dishes being a preparation of wheat flour, milk,

sugar and clarified butter called *lapshi*; grains of gram flour passed through a sieve fried in clarified butter and seasoned with sugar called bundis; tubes containing boiled sugar, fried a clarified butter called jilbis; and raised wheaten cakes fried clarified butter and rice seasoned with sugar clarified butter and condiments called puris. They use no intoxicants except bhang a liquid preparation of Indian hemp flowers, and smoke tobacco. Though most families have a store of rich clothes they are neither careful nor neat in their dress, many of the men being slover and dirty. A family of five spends £4 to £7 (Rs. 40-70) a year dress. The men wear the mustache and whiskers, but shave the chin. They dress like Maratha Brahmans, except that in passing the end of the waistcloth between the legs they draw it tight over the right shin. The men's ornaments are the earrings call bhikbali worth £5 to £15 (Rs. 50-150), the necklace of twisted chain called *gop* worth £10 to £80 (Rs. 100-800), the necklace cal kanthi worth £10 to £100 (Rs. 100-1000), the bracelets called todas worth £5 to £15 (Rs. 50-150), and the bracelets called kadis worth £5 to £15 (Rs. 50-150). The women arrange the hair in a braid. Some have lately taken to decking their hair with flowers and mixing it with false hair. They dress like Gujarat Vani women. Some wear bodices with backs, and some bodices without backs. Almost all wear the *lunga* or petticoat, over which they draw a rich robe, the lower the end of which is fastened into the waistband of the petticoat and the upper end drawn over the head and held in the hand near the waist in front, so as, when the wearer wishes, to form a veil. The petticoats and robes of the Guiarat Vani women are noticeable in the Deccan, because they are oftener of dark-tinted hand-printed calico than the light single colours worn by most Deccan Hindu women. Besides the luck-giving necklace worth 4s. to £1 (Rs.2-10), they have different neck ornaments, hirakadichi sakhali worth £10 to £15 (Rs. 100-150), kantha worth £20 to £50 (Rs. 200-500) putalyachi mal worth £12 10s. to £50 (Rs. 125-500), thusi worth £10 to £12 10s. (Rs. 100-125), and vajratika worth £2 to £4 (Rs. 20-40). Their bracelets include bangdis worth £10 to£12 10s. (Rs. 100-125), gots worth £10 to £15 (Rs. 100-150), patlis worth £15 to £50 (Rs. 150- 500), and todas worth £20 to £25 (Rs. 200-250). The only feet ornaments are sakhlis and todas, each worth £10 to £15 (Rs. 100-150); and toe ornaments, jodvis and masolis, each worth £1 to £1 12s. (Rs. 10-16). They are patient, hardworking, respectful, and thrifty. Most of them are grocers, cloth and siik sellers, bankers, and moneylenders, and a few are Government servants. When he reaches his sixteenth year a boy is placed as a clerk under some trader or shopkeeper for six months or a year, during which he manages to pick up the business. At the end of the time he begins to trade on his own account and makes £2 to £5 (Rs. 20-50) a month. Most of their large

purchases we made in Bombay. They work from early morning to noon, rest till two, and again work till eight in the evening. The opening of railways has increased competition and lowered profits. Many are rich and almost all are well-to-do and free from debt. The women do not help the men in their work, but mind the house and spend the rest of their time in embroidery.

A Gujarat Vani woman generally remains for her confinement at her husband's house. When a woman is in labour a midwife is sent for, who is generally a Kunbi. She delivers the woman, cuts the child's navel cord, and buries it either in the lying-in room or outside of the house. The woman and child are bathed in warm water and the woman is given molasses and clarified butter to eat and anise-seed water to drink. During the first three days the child is fed on honey and castor oil, and from the fourth day is given the breast. The mother from the fourth to the twelfth day is fed in sanja, that is the grit of wheat flour boiled with sugar and clarified butter. On the sixth evening a blank sheet of paper, a pen, and an inkstand are laid near the mother's cot for the goddess Sati to write the child's fortune, and grains of parched grain coated with molasses are given to little children to eat. The mother is unclean for eleven days. The child is named when it is a month or five weeks old. On the naming day five or six married women are asked to dine, and the father gives the child feet and waist ornaments and the mother a robe and bodice. In the evening the child is laid in a robe folded in hammock fashion, and is named by an unmarried girl, who is given sugar, a piece of coa-kernel, and betel leaves. A birth costs £2 to £3 (Rs. 20-30). The javal or hair-cutting ceremony costs £2 10s. to £10 (Rs. 25-100), a vow is made on the child's behalf, its hair is not cut until the vow is paid. Sometimes the hair-cutting comes off during the marriage of one of the child's kinspeople, and sometimes on any good day between the sixth month and the fifth year of the child's age. The Barber who is to cut the hair clips a small lock with a silver pair of scissors worth 2s. to 10s. (Rs. 1-5). The ceremony ends with a feast to friends kinspeople and Brahmans. They generally marry their daughters between eleven and fifteen spending £50 to £200 (Rs.500- 2000) on the marriage, and their boys between thirteen and twenty-five at a cost of £200 to £500 (Rs. 1000-5000). When the girl's father thinks of marrying his daughter, he takes some near kinsman and goes to a family who have a boy likely to make a suitable match. The kinsman sees the head of the boy's family and tells him why they have come. If the kinsman finds that the boy's father favour the match, he returns with the girl's father. Then the boy's father in presence of witnesses agrees to the offer and names the sum which he can afford to spend on ornaments

for the girl. If the girl's father has no hope of securing a better or a richer husband for his daughter, he marks the boy's brow with vermilion and give cocoanuts, betel leaves, and dry dates to those who are present. The fathers go to an astrologer to fix the marriage day, and boy's father gives the astrologer a cocoanut and 3d. (2 as.) Marriage cards are sent to friends and relations, and in front of the girl's and the boy's houses a marriage porch is built. A Ganpati of brass or silver is set in a large earthen jar marked with lines of white and red, and the jar is placed in the house on a heap of wheat. The mouth of the jar is covered with a small earthen vessel and a lamp is kept burning before it. A month before the day fixed for the marriage the ceremony of rubbing the boy's face and feet with pithi or grampaste begins. The boy is seated on a four-legged or chaurang stool and his face and feet are rubbed by women, who afterwards sit round him and sing songs. Each of this women on leaving is every day given a handful of betelnut. This ceremony is called Lahan Ganesh or the Little Ganpati. Four days before the marriage day caste feasts begin. On the marriage day the bridegroom is decked with ornaments and garlands of flowers, dressed in rich clothes his turban being stuffed with pieces of green kinkhab or brocade, and carrying a cocoanut in his hand he is taken to the bride's on horseback with music and a company of friends. When the procession reaches the bride's, her mother comes out of the marriage booth, waves a drinking pot full of water round the face of the bridegroom, and pours the water over the horse's feet. The bridegroom is taken from the horse and seated on a four-legged stool. The bride is led into the booth and seated on a low stool facing the bridegroom. They hold each other's right hands and a piece of coloured cloth is drawn between them. The priest recites eight luckgiving verses. At the end of the verses the priest binds round the right wrists of the bride and the bridegroom a kankan or bracelet of cotton thread passed through a *gelphal* or Vangueria spinosa fruit, and the married couple pass fourteen times round a sacred fire or hom the bridegroom walking in front of the bride. On the fourth day after the marriage the bride's father presents the bridegroom with clothes and vessels as the bride's portion and the married pair go on horseback in procession to the bridegroom's. At the bridegroom's the priest worships and bows out the divinity who under the name of Ganpati was summoned at the beginning of the ceremonies. When the marriage guardian has been bowed out the bride and bridegroom fall at the feet of the priest, who blesses them. At the bridegroom's house, the castepeople are for several days feasted often at great expense.

When a girl comes of age she is held to be unclean and is made to sit by herself for four days. The event is not marked by any other ceremony. In the seventh month of a woman's first pregnancy a caste feast is given, and her parents present her and her husband with new clothes. She is seated on a four-legged stool and her lap is filled with grain and fruit by women, who sing as they fill her lap. She is taken to the houses of friends and kinspeople to pay her respects in a palanquin or a carriage. This costs £2 10s. to £10 (Rs. 25-100).

A dying man is laid on a spot of ground which has been washed with cowdung, and wheat grains and copper or silver coins are distributed to begging Brahmans. When they hear of the death, the friends and kinspeople come to the house, and the women standing in a circle beat their breasts and wail and the men make a bier. A cocoanut is tied to the bier and a piece of sandalwood is fastened at its head. The body is bathed, robed in a waistcloth, laid on the bier, and covered with a shroud, sometimes a richly embroidered shawl. Unlike the Marathas they cover the face of the dead. When all is ready the chief mourner starts carrying the fire-pot in a sling. On the way to the burning ground the bearers set down the bier and change places and the son drops a copper coin on the spot. At the burning ground they lay the body on the pyre and kindle it. While the body is being consumed they thrice stir the pile with poles whose ends are smeared with clarified butter. The funeral party bathe and return to the house of the deceased, staying for a time, and trying to comfort the women who are weeping and wailing. Next day the mourners go to the burning ground, remove the ashes, and place on the spot a little rice and split tur pulse, a copper coin, and an earthen pot filled with water. The impurity caused by a death lasts ten days. Meshri or Brahmanic Vanis perform shradh ceremonies on the tenth, eleventh, and twelfth day after a death, and feed castepeople on the twelfth or thirteenth. Shravak or Jam vanis do not perform *shradhs*, but go to their temples or apasras on the twelfth day and offer scents and flowers to the Tirthankars. [Shravaks pay little attention to the Brahman rule that a death causes a ten day's impurity.]

Gujarat Vanis are scattered in small numbers over the district. They settle social disputes at meetings of the castemen. Offences against caste are punished by fines ranging from 2s. to £2 10s. (Rs.1-25), and the amount is spent either in charity or on caste feasts. They send their boys and girls to school, keeping the boys at school till sixteen and the girls till nine. They teach the boys to read, write, and cast accounts. They do not confine themselves to any one branch of trade and are quick in taking advantage of new openings. As a class they are well-to-do.

Marwar.

MARWAR VANIS are returned as numbering 9637 and as found over the whole district. Most, if not all, have come into the district since the beginning of British rule. They are divided into Osvals and Porvals, who eat together but do not intermarry. The two divisions do not differ from each other in appearance, speech, religion, or customs. Their surnames are Chavan, Parmar, Pohanachavan, and Sakruju; families bearing the same surname do not intermarry. The names in common use among men are Gavra, Hattaj, Khumaji, Khushal, Kusna, Ram, and Sada; and among women Bani, Devi, Dhande, Naju, Nopi, Padma, and Rakhma. They are rather tall dark and stout, as a rule with big faces and sharp eyes. The men generally shave the head except the top-knot and the face except the mustache and eyebrows. Some wear a lock of hair curling over each ear, and the back hair is mostly worn long with an upward curl at the tips. Their home tongue is Marwari, but with others they speak an incorrect Marathi. Most of them live in houses of the better class, two or more storeys high, with walls of brick and tiled roofs, their furniture including metal vessels, boxes, carpets, beds, and pillows. Their staple food is wheat cakes, rice, pulse, vegetables, and butter. They are vegetarians, neither eating fish nor flesh, and drinking no liquor. They dress either like Marathi Brahmans or in small tightly wound particoloured turbans, generally yellow and red or pink and red. Their women wear the petticoat or ghagra, a short sleeved open-backed bodice, and a cloth rolled round the waist of the petticoat, passed over the head and face, and the end held in the hand in front. Their arms are covered with ivory bracelets and they do not deck their hair with flowers. They are hardworking, sober, and timid, but dirty, miserly, greedy, and unprincipled in their dealings. Besides in grain, cloth, and metal, they deal in condiments, spices, sugar, butter, flour, and oil. They are moneychangers and moneylenders. They make advances to almost any one and recover them by all sorts of devices. A family of five spends £1 to £1 10s. (Rs. 10-15) a month on food and £1 to £3 (Rs. 10-30) a year on clothes. They generally do not own houses, but rent them at 10s. to £1 (Rs. 5 -10) a month. They sometimes have clerks, whom they pay 10s. to £2 (Rs. 5-20) a month. Their furniture and household goods vary in value from £20 to £50 (Rs. 200-500). A birth costs £1 to £3 (Rs. 10-30), a boy's marriage £30 to £50 (Rs. 300-500), a girl's £20 to £30(Rs. 200-300), and a death £5 to £10 (Rs. 50 - 100). They are Shravaks or Jains by religion and their chief god is Kshetrapal whose chief shrine is near Mount Abu. They also worship the usual Brahmanic or local gods and goddesses. Their priests are Shrimali Brahmans, who conduct their marriage and death ceremonies. They marry their girls before

they are thirteen and their boys before they are twenty. They rub turmeric on the boy's and girl's bodies from three days to a month before the marriage and spend the time in feasts and make presents of clothes. On the marriage day the boy is seated on a horse, the marriage ornament is tied to his brow, and he is taken to the girl's with a dagger in his hand. Before he dismounts, a stick is handed to him and with it he touches the marriage porch. The girl's mother comes out carrying on her head two or three brass water-pots or kalases piled one on the other. The boy bows and drops 4s. to £1 (Rs. 2-10) in the pots. She then goes back and comes with a plate in which are two cups, one filled with curds and the other with redpowder or kunku. She marks the boy's brow first with redpowder and then with curds and squeezes the boy's nose four times. The boy dismounts and takes his seat in a cot in the marriage hall, at each corner of which is piled a pillar of seven earthen jars. The girl is brought out and seated in front of the boy with grains of rice in her hand. A cloth is held between the boy and the girl. The girl throws the grains of rice over the boy's head and the cloth is withdrawn. She then takes her seat on the boy's right. The hems of their garments are tied together by a married woman, a thread necklace is fastened round their necks, and the sacrificial fire is lit, and barley sesamum and butter are thrown into it. The boy and girl walk thrice round the fire and before taking the fourth turn the girl walks in front of the boy and does not make the fourth turn until the elders have given her leave. All this while the priests keep reading lucky verses or mangalashtaks, and no sooner is the fourth turn finished than grains of rice are thrown over the heads of the boy and the girl and they are married. They burn their dead, have no headman, and settle social disputes at meetings of the castemen of each division. They send their boys to school and are well-to-do.

Vaishya.

VAISHYA VANIS are returned as numbering 893 and as found all over the district except in Junnar. They have no tradition of their origin and no remembrance of any former settlement or of their arrival in the district. They have no subdivisions. They are middle-sized and stout, and their women are fair. They speak Marathi and live in houses with mud and brick walls and tiled roofs. They eat fish and flesh and drink liquor. They dress like Deccan Brahmans. They are thrifty, hardworking, sober, and orderly, and earn their living as traders, shopkeepers, and husbandmen. They worship the usual Brahmanic and local gods and goddesses, keep the regular fasts and feasts, and go on pilgrimage to the chief Brahmanic places of resort. They pay

great respect to their priests who are Deshasth Brahmans. They have a caste council and send their boys to school. They are a steady people.

HUSBANDMEN

Husbandmen include five classes with a strength of 449,930 or 53.13 per cent of the Hindu population. The details are:

POONA HUSBANDMAN, 1881.

| CLASS. | Males. | Females. | Total. |
|---------|---------|----------|---------|
| Baris | 38 | 30 | 68 |
| Kachis | 350 | 358 | 708 |
| Kunbis | 198,403 | 198,184 | 396,587 |
| Malis | 26,306 | 26,251 | 52,557 |
| Pahadis | 4 | 6 | 10 |
| Total | 225,101 | 224,829 | 449,930 |

Baris

Baris, or Bari Tambolis, that is Bari betel-leafsellers, are returned as numbering sixty-eight. All are found in the city of Poona. They believe that they came to Poona about a hundred years ago from Barhanpur in West Berar. They are called Bari-Tambolis to distinguish them from Teli or Oilmen Tambolis, from Maratha Tambolis, and from Musalman Tambolis. The Baris surnames are Berad, Hage, Ikare, Makode, Musale, Povar, Panchod, and Tade, and persons bearing the same surname cannot intermarry. The names in common use among men are Ganpati, Mittraji, and Shivram; and among women Ambu, Lahani, Shita, and Sundar. They look like Marathas, being middle-sized and dark. The men wear the top-knot, mustache and whiskers, but not the beard. They speak Marathi without any peculiarities. Most of them live in houses of the better class, two or more storeys high, with walls of brick and tiled roofs. They keep their houses clean and have copper brass and earthen vessels, blankets, and carpets. They own cows and buffaloes, but almost none have servants. They are neither great eaters nor good cooks. There is nothing special or proverbial about their style of cooking or their pet dishes. Their staple food is millet, pulse, vegetables, and spices, and they eat rice, fish, and the flesh of

goats, sheep, poultry, and occasionally eggs. They say they do not eat from the hands of any one but a Brahman. They drink both country and foreign liquor, smoke tobacco, and hemp flowers or ganja, and take opium. Their holiday dishes are oil-cakes and sugared milk. The men wear a waistcloth, shouldercloth, coat, waistcoat, Maratha turban, and shoes. The women wear a Maratha robe and bodice and glass bangles. They tie their hair in a knot behind the head, but do not deck it with flowers or use false hair. They have no special liking for gay colours. Their holiday dress does not differ from their every-day dress except that it is freshly washed. Except a brass, gilt, or gold ring for the ear called bhikbali worth 1s. 3d. to 2s. (Re. %-1), the men seldom wear any ornaments. The women's ornaments are a gilt or gold buttoned lucky necklace or mangalsutra with glass beads worth 2s. to 2s. 6d. (Rs. 1-1¼), queensmetal bracelets called *yella* and *got* worth 2s. to 4s. (Rs. 1-2), and queensmetal anklets called jodvi and viravlya worth 3*d.* to 6*d.* (2- 4 *as.*)

They are hardworking, frugal, and orderly. They deal in betel leaves, buying them from Tirgul Brahmans, Malis, and Marathas at 2s. to £1 16s. (Rs. 1-18) for a kudti of about 16,500 leaves. Betel leaves are of four kinds: navatis worth 2s. to 10s. (Rs. 1-5) the kudti of 16,500 leaves; [The details are: In each kudti 37 kavlis and in each kavli 450] leaves, that is a total of 16,650. talachis worth 2s. to 4s. (Rs. 1-2) the kudti; gachis worth 6s. to £1 4s. (Rs. 3-12) the kudti; and shidis worth 6s. to £1 16s. (Rs. 3-18) the kudti. They keep no holidays and work steadily without busy or slack seasons. They generally work from six in the morning to twelve, and from two to nine. The women help the men by turning the leaves. A family of five spends 10s. to £1 (Rs.8-10) a month on food and £1 to £1 10s. (Rs. 10-15) a year on clothes. They live in hired houses paying 9d. to 1s. 3d. (6-10 as.) a month. A birth, whether of a boy or of a girl, costs 10s. (Rs. 5); a marriage of a boy £5 to £7 10s. (Rs. 50 - 75), and of a girl £4 to £6 (Rs.40-60); and a death £1 to £1 4s. (Rs.10-12). They have house images of Ganpati, Mahadev, and Maruti, and their family goddess is the Bhavani of Tuljapur. Their priests are generally Deshasths. Their fast days are Mahashivaratra in February, nine days of Navratra and Ramnavmi in April, Ashadhi Ekadashi in July, Gokul-ashtami in August, and Kartiki Ekadashi in November, and their feasts are Shimga in March, Padva in April, Nagar-panchami in August, Ganesh-chaturthi in September, Dasara in October, and Divali in November.

They have no *guru* or teacher and profess to disbelieve in witchcraft, soothsaying, omens, and evil spirits. For cutting the child's navel cord they pay the midwife $7\frac{1}{2}d$. to 1s. 3d. (5-10 as.), and feed the child for

three days on honey and castor oil. On the evening of the third day the child takes the breast and the mother is fed on butter, wheat, and molasses. On the night of the fifth they draw redlead figures on the wall in the mother's room and in front of the figures place *methi*, that is fenugreek or Greek hay, and rice or millet bread, and the mother with the babe in her arm bows to the figures and retires. The same ceremony is repeated the next night in honour of the goddess Satvai. On the evening of the twelfth day the child is named and wet gram and packets of betelnut and leaves are presented to married women. The *javal* or hair-cutting takes place on any day after a child is four months old and before it is a year and a quarter old.

They marry their girls between five and nine and their boys between twelve and twenty-five. Their asking and betrothal ceremonies are the same as those of Maratha cultivators and their quardian or devak is their house goddess. On the day before a marriage they give their house gods to a goldsmith to clean at his house. When they are clean they bring the gods home with music and install them with much ceremony, worshipping them with great pomp, playing music, and offering them abundance of sweet-smelling flowers. Oil-cakes are prepared and a feast is held; The boy and girl are rubbed with turmeric at their houses. Either on the same day or on the day after relations and friends are feasted. On the marriage day the boy goes on horseback to the girl's house with kinsmen and kinswomen, friends, and music. At the girl's water and rice are waved round his head, he is taken into the house and made to stand either on a low wooden stool or in a new bamboo basket facing the bride, and a cloth is held between them. Brahmans repeat marriage verses and at the end throw grains of red rice over the heads of the boy and girl, and they are husband and wife. The skirts of the boy's and girl's robes are tied together, and they are seated in the marriage booth and the sacrificial fire is lighted. They are taken before the marriage gods and bow low before them. Their garments are untied, and the boy and the girl repeat one another's names in couplets. On the following day presents of clothes are exchanged between the two houses, and, in addition, the boy is given a plate or thala of gueensmetal, a brass or copper water-pot called tambya, and a brass lamp. The relations on both sides throw finger rings and copper and silver coins into the plate for the girl. The girl's parents take the girl in their arms, and saying to the boy's parents, 'All this while she was ours, now she is yours,' place her in the boy's arms. The boy's mother puts a little sugar in the girl's mouth, sticks a rupee on her brow, and looks in her face. The skirts of the boy's and girl's robes are tied and they are seated either on a horse or in a carriage, and, accompanied by kinspeople and friends, go in procession to the boy's house. Before entering the house the boy's mother waves cooked rice and bread over their heads and throws the rice and bread away. The boy and girl go into the house, throw grains of rice over the heads of the house and marriage gods, bow before them, and retire. On the following day, if well-to-do they give a feast of sweet cakes or *puran-polis*, or if poor distribute betel-nut and leaves. This ends the marriage ceremony. When a girl comes of age she is seated by herself for three days, bathed on the fourth, presented with a new bodice and robe, and her lap is filled with plantains, guavas, dates, pomegranates, oranges, and wheat or rice. In the evening the girl and afterwards the boy are taken to a room set apart for their use. This is done either at the boy's or the girl's. If at the girl's the boy stays for a couple of days and then goes home either with or without his wife.

When a Bari is on the point of death rice or wheat grains are distributed in his name to beggars and a *tulsi* leaf is laid in his mouth. When he dies, bamboos worth 6d. to $7\frac{1}{2}d$. (4-5 as.), two earthen pots worth about 1½ d. (1 anna), a white cloth worth 2s. to 5s. (Rs. 1 - $2\frac{1}{2}$), and cowdung cakes worth 7s. to 14s. (Rs. $3\frac{1}{2}$ -7) are bought. The body is brought out of the house, hot water is poured over it, and it is wrapped in the new cloth, and laid on the bier. If the deceased is a widow her brow is marked with abir on sweet-scented powder. If her husband is alive she is dressed in new green robe and bodice, her brow is marked with redpowder and turmeric, glass bangles are put on her wrists, and her lap filled with grain dry cocoa-kernel and dates, and she is laid on the bier. The bier is carried on the shoulders of four near relations and the chief mourner walks in front with an earthen pot containing burning cowdung cakes. Half-way to the burning ground the bier lowered, a few grains of rice and a copper are laid by the side of the road near the corpse's head, and each mournes drops two or three the pebbles over the copper. The bearers change places and carry the corpse to the burning ground, dip it in a stream river or pond, and the chief mourner dashes on the ground the pot containing the burning cowdung cakes. A few cowdung cakes are placed over the burning cakes, a pile is raised, and the dead body is laid on it. The chief mourner first sets fire to the pile and then the other mourner When the skull splits the chief mourner takes another earthen jar full of water on his shoulder and walks thrice round the pyre beating his mouth with the back of his right hand. When the body is burnt to ashes they bathe and return to the chief mourner house carrying nim leaves. At the mourner's house, a lamp is kept burning on the spot where the deceased breathed his last. The mourners take a look at the lamp, sprinkle *nim* leaves round it, and return to their homes. On the

third day, accompanied by a couple of near relations, the chief mourner goes to the burning ground, gathers the ashes, and throws them into the river or stream, sprinkles cow's urine, turmeric, redpowder, and flowers on the spot where the body was burnt, burns frankincense, and offers parched rice grain and sweetmeats to the spirit of the dead. He gathers the unburnt bones in an earthen jar, puts them somewhere in hiding, and returns home. The chief mourner is considered unclean for ten days. At the end of the ten days he either buries the bones in the jar or throws them into water. On the tenth day he feasts the four corpse-bearers with a dish of wheat and molasses called *thuli* and curry. A flower dipped in butter is drawn from the shoulders to the elbow of each of the corpse-bearers, and they retire. This rite is called *khande utarne*, literally the shoulder taking-away, meaning apparently the taking away of the uncleanness, that is of the unclean spirit, which, settled on their shoulders in consequence of their having borne the body. On the eleventh day the chief mourner goes to the burning ground, sets twelve or thirteen wheat balls in a row, drops redpowder and flowers over them, and throws them into water. On the twelfth day, the chief mourner and his family priest go to the burning ground and make a three-cornered mound and set three earthen jars on it. Over each jar is placed a small wheat cake and a rice ball and at each corner of the mound is planted a flag six or eight inches long. The mourner retires to some distance and waits for the crows to come, and when a crow has come and touched one of the balls he bathes and goes home. The Brahman who accompanies him is presented with a pair of shoes, an umbrella, a dining plate or tat, and a water-pot or tambya, and 6d. to 1s. (4-8 as.) in cash. On the thirteenth day the chief mourner fills a plate with food and throws it in a stream or river. The caste is feasted and treated to a dish of sweet cakes or *puran-polis*. A near relation presents the chief mourner with a turban and the mourning or dukhavta is over. The Baris allow child-marriage, widow-marriage, and polygamy, but not polyandry. They have a caste council and settle social disputes at meetings of the castemen. They send their boys to school for a short time. They are a steady class.

KACHIS.

Kachis are returned as numbering 708 and as found in Khed, Sirur, Haveli, Bhimthadi, and Poona. They say their forefathers came from Gwalior and Aurangabad; when and why they do not know. They are divided into Marwari and Pardeshi Kachis. The following details apply to Marwari Kachis who are divided into Kalao-kachis, Dhimar-kachis, Karbhoi-kachis, and Bundele-kachis, who do not eat together or

intermarry. Their surnames are Bundele, Elchya, Gwaliari, and Katkariya, and persons bearing the same surname do not intermarry. The names in common use among men are Dhanu, Jairam, Tukaram, and Tuljaram; and among women, Ganga, Jamna, and Kundi. The Kachis are strong and well made. The men wear the top-knot but neither whiskers nor beards, and their home tongue is Hindustani. Most of them live in houses of the better sort, one or two storeys high, with walls of brick and tiled roofs. They eat fish and the flesh of goats, sheep, and domestic fowls, and drink liquor. Their staple food is millet, wheat, split pulse, and rice. They generally eat in the evening. A family of five spends £1 to £1 10s. (Rs. 10-15) a month on food. The men wear a waistcoat, a coat, a waistcloth, a shouldercloth, a Maratha turban, and Brahman shoes; the women wear a bodice with a back and either the full Maratha robe passing the skirt back between, the feet and tucking it into the waist behind, or a petticoat and short upper robe the end of which they draw over the head. They are hardworking, thrifty, sober, and orderly. They are fruit-sellers, taking fruit; gardens on hire from their owners at £7 10s, to £20 (Rs. 75-200). They worship the usual Brahmanic gods and goddesses and keep the regular fasts and feasts. Of these the chief are Holi in March Akshadtritiya in May, and Rakhipornima in August. Their priests are Pardeshi Brahmans whom they treat with great respect. Their customs are like those of Marathas. A birth costs £1 to £2 (Rs. 10- 20), and naming 4s. to £1 (Rs. 2-10). Their quardian or devak is an axe or kurhad and the panchpallavs or five leaves of the Ficus religiosa pipal, F. glomerata umbar, F. indica vad, F. infectoria nandruk, and the mango, which they tie to a post of the marriage hall at both the boy's and the girl's houses. They marry their children seated on carpets near each other, the girl to the left of the boy. When the marriage texts are finished the hems of their garments are tied together, and they make a bow before the house gods. The boy and girl are offered sugared milk and taken in procession on horseback to the boy's parents' house. Feasts are exchanged and the marriage is over. The ceremony costs the boy's father £1 to £15 (Rs.10-150), and the girl's father £1 to £2 (Rs. 10-20). They either bury or burn their dead and death costs them £1 to £2 (Rs. 10-20). They have no headman and settle social disputes at meetings of castemen. The offending person is fined 2s. to 4s. (Rs. 1-2), and when the amount is recovered it is generally spent on drink. They send their boys to school and as a rule are in easy circumstances.

KUNBIS.

Kunbis are returned as numbering nearly 400,000 and as found over the whole district. They seem to have a strong ear or pre-Aryan element. The term Kunbi includes two main classes Kunbis and Marathas, between whom it is difficult to draw a line. Marathas and Kunbis eat together and intermarry and do not differ in appearance, religion, or customs. Still these two names seem to represent, though in both cases with much intermixture the two main sources from which the bulk of the present peasantry are sprung. The Kunbis represent those in whom the local or early, and the Marathas those in whom the northern or later element is strongest. The Poona Kunbis, not content with calling themselves Marathas, go so far as to call themselves Kshatriyas and wear the sacred thread. The Marathi accounts seem to show that the great Shivaji (1627-1680) never were the sacred thread or *yajnopavit* till he was enthroned and raised to the rank Kshatriya. See Raygad in Bombay Gazetteer, XI. 369, 370 and note 1.] They include a traditional total of ninety-six clans which are said to be sprung from the rulers of fifty-six countries who are the descendants of Vikram of Ujain whose traditional date is B.C. 56, Shalivahan of Paithan whose traditional date is A.D. 78, and Bhojraja of Malva whose traditional date is about the end of the tenth century. According to the traditional accounts, the Bhosles to whom Shivaji belonged are the descendants of Bhojraja; the descendants of Vikram are called Sukarrajas; and those of Shalivahan Rajakumars. All claim to belong to one of the four branches or vanshas of the Kshatriyas, Som-vansha or the Moon branch, Surya-vansha or the Sun branch, Sesh-vansha or the Snake branch, and Yadu-vansha or the Shepherd branch. The names of some of the families of these four branches are: Of the Sun branch, Aparadhe, bichare, Bhosle, Bhovar, Dalvi, Dharrao, Hendhe, Gavse, Ghad, Ghadke, Ghag, Ghorpade, Joshi, Kadam, Malap, Mulik, Nakase, Nalavde, Nayak, Palve, Pardhe, Patak, Patade, Povar, Rane, Rao, Raul, Sagvan, Salve, Sankpal, Shinde, Shisode, Shitole, Surne, and Vaghmare; of the Moon branch, Bhate, Chavhan, Dabhade, Dalpate, Darbare, Gaikavad, Ghadam, Ghadke, Insulkar, Jagtap, Kalpate, Kamble, Kambre, Kapvate, Kathe, Kesarkar, Man, Mhatre, Mohite, More, Nikam, Nimbalkar, Patankar, Randive, Savant, Shelar, and Varange; of the Snake branch, Bagve, Bhoir, Bogle, chirphule, Dhulap, Dhumal, Dhure, Divte, Gavli, Jamble, Kasle, Lendpoval, Mhadik, Mokari, Namjade, Parabh, Sangal, Tavde, and Thakur; and of the Shepherd branch, Bagvan, Bulke, Dhumak, Gavand, Gharat, Ghavad, Ghogale, Jadhav, Jagle, Jagpal, Jalindhare, Jare, Jasvant, Mokal, Malpovar, Patel, Phakade, Shelke, Shirgone, Shirke, Tambte, Tovar, and Yadav.

Each Kunbi has three personal names, a priestly name a house name and a pot name. The priestly name, which is known as the ras nav or star name, depends on the position of the stars at the time of the child's birth. The priestly names generally chosen for boys are Amritya, Ankorsa, Babaji, Dungarji, and Ravji, and for girls Saku, Bhagu, and Chimi. The house name is chosen by the elders of the house; the commonest are for men Khandu, Pandu, Raghu, and Vithu; and for women Kashi, Parvati, Rama, and Savitri. The pet or avadate name is generally given by the child's parents or the mother's relations. The commonest pet names for boys are Appa, Babu, Bala, and Nana; and for girls Abbi, Bai, Kaki, and Tai. His pet name sometimes clings to the bearer through life. When a boy grows up ji or rao is added to the name, and to girls' names di or bai. In addition to his personal name a man bears his father's name and surname, and a woman her husband's name and surname, thus Lakshman son of Khandu Povar, and Bhagirthi wife of Shiva Bhosla.

As a class Kunbis are dark, of middle stature, with round faces, straight nose, thickish lips, and high bare and protruding cheekbones. They are strong, hardy, enduring, and muscular. The Kunbi women, like their husbands, are strong and hardy, but the veiled or gosha Maratha women are generally weak. Great numbers die in infancy. Those who survive are generally long-lived, few dying before the age of sixty or seventy. In the hilly west the Kunbis are generally weaker, thinner, and fairer than the Kunbis of eastern Poona. A Kunbi or Maratha girl is slender, dark-skinned, and generally graceful. She becomes a mother at fifteen or seventeen and is past her prime at twenty. Boys are generally active and clever, but at an early age the men grow dull and dreamy. [In 1819 Dr. Coates (Trans. Bombay Lit. Soc. III. 203) described the Poona Kunbis as rather low in stature and lean, the hands feet and bones small, the muscles prominent though not bulky, the limbs often well-shaped. Twenty men in a hundred averaged five feet four inches in height and 7 stone 10\mathfrak{4} in weight. Five feet six inches was tall and eight and a half stone was heavy. The black straight hair was shorn except the mustache and the top-knot. The skin was of varying shades of bronze sometimes nearly black. The face was more round than oval, the brow short and retiring, the cheek-bones high, the eyes full and black, the nose straight and prominent, the teeth not remarkably good and stained black or red. The expression was sedate and good with little quickness and no ferocity. Children were often quick and and men of forty dull. With few exceptions the women had no pretensions to beauty. Still when young the round plump face, smooth clean skin, fine long black hair, large sparkling eyes, and sprightly gait made them interesting. Their bloom

soon passed. They were old at eighteen and wrinkled and ugly at twenty-five (Ditto, 232). About half died as children (Ditto, 244). The survivors were long-lived, through as no registers were kept, the ages were doubtful. Out of 164 the twenty-five oldest men in the village of Loni were said to average about 76½ years and of 198 the twenty-five oldest women were said to average 72½ years.] The men shave the head except the mustache and in a few cases the whiskers. They speak Marathi both at home and abroad. Though it is surrounded by heaps of refuse, the inside of a Kunbi's house is always clean and tidy. The floors and walls are fresh-cowdunged every fortnight and the front veranda is always swept clean. They often keep their cattle under the same roof as themselves either with or without any partition, or under a shed attached to the house. Besides their field tools, their household goods include earth and metal water-pots and plates, an iron or brass hanging lamp a frying pan, cooking pots, a grindstone and pin, a handmill, a mortar and pestles, baskets, network utensils, and a bedstead, the whole not varying in value more than from £1 10s. to £3 (Rs. 15-30) Of the Poona Kunbi's house-gear in 1819, Dr. Coates (Trans. Bom. Lit. Soe. III. 209-210) gives the following details: A stone handmill worth Re. 1, two iron-tipped wooden pestles worth Re. ½, a large copper water-vessel worth Rs. 10, two three small drinking copper vessels worth Rs. 2 each, two or three round shallow eating dishes of copper or bell-metal each worth Rs. 1½ to Re. 1, an iron griddle worth Re. 34 a frying pan worth Re. 1, four or five glazed and twenty to thirty unglazed earthen pots together worth Rs. 2½ to Rs.3, a large wooden kneading dish, several baskets, two iron cup-lamps, two rude couches each worth Re. 1, or a whole average value about Rs. 40. A rich Kunbi has more copper vessels, a copper lamp instead of an iron lamp, and his couches are laced with tape instead of with rope.] An ordinary house with room for a family of five does not cost more than £15 (Rs. 150) to build or 8s. to 12s. (Rs.4-6) a year to rent. The monthly keep of a milch cow comes to about 6s. (Rs. 3) and the keep of a she-buffalo varies from 8s. to 10s. (Rs. 4-5).

Kunbis are moderate eaters and are proverbially fond of pepper and other hot spices. Besides grain pulse fruits spices oils curds and butter, they eat fish fowls eggs sheep goats hare deer and wild hog, and besides water and milk they drink liquor. They do not eat flesh except on marriage and other family festivals and on a few leading holidays such as *Dasara* in October and *Diwali in* November. They sometimes vow to offer an animal to a god, and, after offering its life to the god, eat its flesh. They generally drink liquor about sunset, an hour or so before the evening meal. The use of liquor is not forbidden, but drinking is considered disreputable and is rare among men and almost

unknown among women. Kunbis who indulge in liquor drink as much as possible in private and by stealth. Besides liquor their only stimulant or narcotic is tobacco. It is chiefly smoked, but is also chewed by men and sometimes by women. Most grown men and women and many youths of ten and over when hardworked depend much on their tobacco pipe. Their usual holiday fare is vermicelli or shevaya eaten with milk and molasses. Their every-day fare consists of millet, rice, vegetables and fruit cut in pieces, split pulse, and alan that is gram flour boiled with cumin coriander pepper salt turmeric and onions. They take three meals a day. They generally breakfast on bread with some vegetable relish or a raw onion. About noon their wives bring their dinner of bread and vegetables and either fish, flesh, or split pulse. Their supper, of bread vegetables milk or some liquid preparation of pulse, is eaten about eight. The ordinary daily food of a husbandman, his wife, two children, and a dependant costs about 3d. (2 as.), but landholders are not actually put to this expense as all these articles, except tobacco, are the produce of their own fields.

Kunbis as a class are neat and clean in their dress. They are seldom rich enough to indulge their taste, but the well-to-do are fond of gay clothes, the men wearing generally red or white turbans and the women red robes. Indoors the Kunbi wears a handkerchief passed between his legs, the ends fastened behind to a waistcord. Out of doors he rolls a loincloth round his waist, covers his body with a waistcloth or armless jacket, and wears a turban on his head and sandals on his feet. In cold and wet weather he throws a coarse blanket over his shoulders or ties it in a hood and draws it over his head. Besides as articles of dress, the blanket and waistcloth are used as sleeping mats and as bags for carrying clothes and garden-stuff. The woman's dress is the full Maratha robe or sadi and the shortsleeved bodice reaching to the waist and covering both the back and chest, the ends being tied in front. [The Kunbi's dress seems to have improved since 1819. Dr. Coates wrote (Trans. Born. Lit. Soc. III. 208): A Kunbi in his every-day attire is a most wretched-looking being, and when first seen by a European can excite only feelings of pity and disgust. In the warm weather at home or afield he is naked except a dirty rag round the loins. He sometimes has a pair of short coarse cotton drawers and a dirty bandage round his lead. In cold and rainy weather he wears a coarse black blanket round his shoulders or over his head. His holiday dress is a turban white red or green sometimes with a flower and a smelling sprig. On the body a coarse white frock falls to the knee, a fine white cotton waistcloth or shouldercloth, coarse drawers, and shoes or sandals, The yearly cost was about Rs. 15¼ then equal to about £18. Of the Kunbi women's dress Dr. Coates

(Ditto, 232-233) says: The dress is a robe or sadi twenty-four feet long by three wide. Three or four feet of one end are thrown over the head and shoulder, in turn or two is passed round the loins, and the rest is puckered up and tucked in a bundle in front and the ends passed between the legs and fixed behind. The other Article of dress is the bodice or *choli*, a short jacket with sleeves to the elbow covering about half the body and tied by the corners in front over the bosom.] The man's ornaments for the ear are a pair of gold rajkadya valued at 4s. to 8s. (Rs. 2-4), a gold bhikbali valued at 10s. to 16s. (Rs. 5-8), or a pair of gold chaukada's valued at £1 12s. to £4 (Rs. 16-40); for the wrist a kade valued at 12s. to £1 (Rs. 6-10), a peti valued at 2s. to 4s. (Rs. 1-2), or a pair of kadis valued at £1 to £4 (Rs. 10-40); for the fingers rings or angthya of silver valued at 2s. to 6s. (Rs. 1-3); and for the waist a silver girdle or kargota valued at £2 to £6 (Rs. 20-60). The woman's ornaments for the ear are bugdya worth 6s. to 10s. (Rs. 3-5), balya of brass worth $1\frac{1}{2}d$. to 3d. (1-2 as.) and rajkadya worth 4s. to 10s. (Rs. 2-5); for the nose a gold *moti* worth 10s. to 16s. (Rs. 5-8); for the neck a silver sari worth 6s. to 12s. (Rs. 3-6), a gold gathle worth £2 to £4 (Rs. 20-40), one to ten gold putly as worth 8s. to £4. (Rs. 4-40), the mangalsutra or lucky necklace of glass beads worth 4s. to 6s. (Rs. 2-3), and a *garsoli* of glass beads worth $1\frac{1}{2}d$. to 3d. (1-2) as.); for the wrists glass bangles worth $1\frac{1}{2}d$. to 3d. (1-2 as). glass chudas worth 34d. (1/2 anna), a got worth 6d. (4 as.), a vale if of silver worth 4s. to 12s. (Rs. 2-6) and if of lead worth $4\frac{1}{2}d$. to $7\frac{1}{2}d$. (3-5) as.), kakan, if of lead worth $4\frac{1}{2}d$. to $7\frac{1}{2}d$. (3-5 as.), a silver vela worth £1 to £4 (Rs. 10-40), and *vakya* worth 10s. to 12s. (Rs. 5-6).

Kunbis are hardworking, temperate, hospitable, fond of their children, and kind to strangers. At the same time they are cruel in revenge and seldom scruple to cheat either Government or their creditors. Among themselves disputes about land often split a village into factions and give rise to quarrels and fights. Otherwise in dealing with each other they are honest, just, and straight for ward. They are frugal in everyday life, but spend large sums on marriage and other feasts. The women are generally chaste and fond mothers, and, except when they fall out with each other, they are modest in look and in words. They help their husbands in the field, and generally have the upper hand in the house. They have a private purse which they fill from the wages they earn and empty on ornaments and sometimes on dinners to neighbour women. Of the character of the Deccan Kunbi Dr. Coates (Trans. Bom. Lit. Soc. III 204) wrote: They are temperate and hardworking, hardy and enduring. Scarely any can read or write. Though not particularly sharp they are minutely informed of everything relating to their calling; they are fond of talk and many have a fair

knowledge of the history of their country. They are better informed and more orderly than the lower classes of Englishmen. They are wildmannered, forgiving, seldom violent or cruel. They are indulgent to their women and most attached to their children. Except at marriages when they are lavish and profuse, they are frugal inclining to parsimony. As far as poverty allows they are hospitable. Among them no mannerly stranger will want a meal. They are just in dealing with each other, but unscrupulous in overreaching outsiders and Government. Theft is scarely known and the voice of the community attaches weight to a virtuous life. They owe their vices to their Government, cunning, cheating, and lying. Their timidity makes them prefer stratagem to force. Still when roused they are not without courage and are by no means contemptible enemies. Love intrigues sometimes take place among the young, but as a rule the women are remarkably chaste. A first offence is punished by a beating; a second offence, especially if the man is a Musalman or a Mhar, may lead to the woman being put out of caste (Ditto, 231-232). Women are well treated, have much freedom, and often rule the house. Each has a private purse supplied by the wages of extra labour and by presents from kinspeople and sometimes from the husband. She spends her money on ornaments either for herself or her child, in feasts to her neighbours, or on sweetmeats. Some of the less scrupulous recruit an empty purse by pilferring grain (Ditto, 230-231).]

Most Kunbis earn their living by tilling the ground and are help in their work by their women. They have not recovered what they lost in the 1876 and 1877 famine. Their credit is small; many have given up husbandry and taken to be messengers, constables, grooms, and daylabourers. The daily round of the Poona Kunbi's life has changed little since 1819 when Dr. Coates (Trans. Bom. Lit Soc. III. 228-232) wrote: The Kunbi rises at cockcrow, washes his hands feet and face, repeats the names of some of his gods, and perhaps takes a whiff of his pipe or a guid of tobacco. He is ready to begin his labour. He loosens his oxen and drives them slowly afield letting them graze as they go. His breakfast is with him in a dirty cloth or it is sent after him by one of his children; it is a cake and some of the cookery of the day before, or an onion or two and some relish. He gets to his field between seven and eight, works for an hour or two, and squats to his breakfast without loosing his cattle. He is at work again in a guarter of an hour and works on till twelve when his wife brings his dinner. He unyokes his oxen, drives them to drink, and lets them graze or gives them straw. He dines under some tree near a well or stream, his wife waiting on him. If others are near they come and talk and sleep for half an hour each on his blanket or cloth. The wife eats what the

husband has left. He is at work again by two or half-past two, and works on till sunset when he moves slowly home, ties up find feeds his oxen, and either washes in a stream or gets his wife to douse him with hot water. After washing, or on holidays oiling with sandal oil, he prays before the house gods or visits the village temple. He then sups with the rest of the men of the family. Between supper and bed at nine or ten is his play-time. He fondles and plays with his children, visits his neighbours, talks about the crops and the village, asks after strangers, or seeks news from any one who has been in Poona. In the two or three months between January and April, when field work is light, he takes his meals at home and joins with other villagers in loafing in the shade and chatting, or he visits friends in neighbouring villages, or he goes on pilgrimage. During the busy season the Kunbi's wife rises between four and five, grinds the day's grain, sweeps the house, and clears out ashes and dung from the cow-house, burying part in the manure-pit and making fire-cakes of the rest. She fills the water jars with fresh water, cooks till about ten, and then with a child or perhaps two children starts for the field with her husband's dinner on her head in a basket. She weeds or reaps till noon, waits on her husband, and dines. After a short rest she is again at work and works till evening carrying home a bundle of grass. She makes ready and eats supper and goes to rest between nine and ten.]

Kunbis cannot tell whether they are Smarts or Bhaqvats. They worship all Brahmanic gods and goddesses, but their chief objects of worship are Bhairay, Bhayani, Biroba, Jakhai, Janai, Jokhai, Kalkai, Khandoba, Maruti, Metisai, Mhasoba, Mukai, Navlai, Phringai, Satvai, Takai, Vaghoba, and Vetal, whom they greatly fear and whose images or taks they keep in their houses. BHAIRAV is the usual village guardian. He has two forms, Kal Bhairav and Bal Bhairav. Kal Bhairav is shown as a standing man with two hands, an hourglass-shaped drum or damaru in his right hand, and a trident in his left. He is encircled by a serpent. Bal Bhairay lives in an unhewn stone covered with redlead or shendur mixed with oil. If kept pleased by a coating of oil and redlead and if he is given offerings of clarified butter Bhairav is kindly. He cures snakebites and tells whether an undertaking will do well or will fail. In the chest of the rough figure of Bhairav are two small holes. The person who wishes to consult the oracle places a betelnut in each of the holes and explains to Bhairav that if the right betelnut falls first it will mean that the undertaking will prosper, and that if the left beteinut falls first it will mean that the undertaking will fail. He asks the god, according as the oven is to be, to let the lucky or the unlucky nut fall first. He tells the god that if he will drop the lucky nut and if his undertaking prospers he will give the god a cock or a goat. Twice a year before

they begin to sow and before they begin to reap the villagers come in procession and worship Bhairay. BHAVANI, that is Parvati the wife of Shiv, has two local names, Phringi and Tukai. She shares with Bhairav the honour of being village guardian; she is generally shown as a rude image, either with two hands, a sword being in the right hand, or with eight hands holding a conch, a wheel, and other articles the same as Vishnu holds. Like Bhairav she is asked the cause of sickness or ill-luck and to advise regarding the future, and like him if she removes trouble or advises well she is given a goat or a cock. BIROBA is worshipped by Dhangars or Shepherds. He lives in an unhewn stone outside of the village. Like Mhasoba he is an unkindly spirit to whom people pray when they are anxious to plague or ruin their enemies. JAKHAI, JANAI, JOKHAI, KALKAI, METISAI, MUKAI and NAVLAI are all local mothers. According to the people's account they are unkindly forms of Bhavani. With the help of two attendants, Naikji and Birji, they do much mischief. They blast crops of grain, plague men with sickness, and carry off travellers. People who owe their neighbours a grudge pray to Janai, Mukai, or one of the other mothers to send them sickness, to kill their cattle, or to ruin their fields. KHANDOBA, literally sword-father, guards the country as Bhairav guards the village. Khandoba is the Ishvar Dev or guardian deity of the Deccan. As a guardian he is shown sometimes, as at his chief shrine at Jejuri, as a ling, the great protector, and more often as a horseman with a sword in his right hand, and his wife Mhalsabai sitting beside him. As a horseman he is Malhari, the form he took when he came to destroy the demons Mani and Malla. As an animal he is the dog who runs beside his horse and in the Deccan is generally called Khandi. As a plant he is turmeric-powder under the name Bhandar. He is the chief house god of all Poona Hindus from Brahmans to Mhars. His house image is always of metal, never of wood or of stone. He drives away the evil which causes sickness. No class honour Khandoba so highly as the Ramoshis. If a Ramoshi makes a promise while laying his hand on turmeric-powder or bhandar, that is on Khandoba, nothing will bring him to break his promise. MARUTI also called Hanuman is the monkey god. No Poona village is without its Maruti, a rudely embossed monkey figure, sometimes within the village and sometimes without, but generally near the gate. He is a kindly god, the great saver of those into whom evil spirits have entered. He is fond of cocoanuts but does not care for blood-offerings. MHASOBA or MASKOBA IS perhaps the commonest and most widely feared of the local evil spirits. He lives in an unhewn stone coated with redlead. These stones are all old dwellings of Mhasoba. Some get forgotten. Then sickness falls on the village and the people go to the village guardian and ask him a series of guestions which he answers by dropping a betelnut or by some other sign. In the

end they find out from the guardian that there is an old neglected dwelling of Mhasoba. The villagers find the stone, cover it with oil and red-lead, and kill a goat or a fowl in front of it. Besides to prevent his working mischief Mhasoba is worshipped by men who have a grudge to clear off or a wrong to avenge. They go to Mhasoba name their enemy, and promise, if he ruins their enemy with sickness that they will give him a goat or a fowl. So much is he feared that when a man knows that some one whom he has ill-used has arranged to set Mhasoba on him, he makes such amends that the god is not forced to exert his powers. SATVAI, or Mother Sixth, is the goddess of pregnant and lying-in women. She is worshipped by barren women, and by lying-in woman on the fifth or sixth day after the child is born. Her image is an armless bust. VAGHOBA, or Father Tiger, lives in an unhewn stone. If he is cared for he guards the village herds from the attacks of tigers. VETAL is the leader of demons and evil spirits. He seems to be the earliest form of Shiv, the leader of spirits, and Ganesh, the lord of spirit troops. Vetal lives in an unhewn stone, three or four feet high, surrounded at a distance of a few yards by a circle of smaller stones in which his leading attendants live. Unlike most shrines the stones in which Vetal and his attendants live are covered both with white and red wash. Vetal and his guard are generally at some distance outside of the village. Vetal's great day is the Mahashivratri or great night of Shiv on the full-moon of *Magh* in February. On that night the villagers, each with a bundle of lighted straw in his hand, walk round the circle of stones howling and bawling. When a Kunbi or one of his family is possessed by an evil spirit he goes to Vetal and promises, if he orders his spirit to give over troubling him, that he will give him a goat or a fowl. Vetal is the patron of wrestlers and athletes. On one of the holidays the villagers go and wrestle at Vetal's circle. Vetal's sign is a cane called bet or vet, from which he seems to get his name. From his apparent sameness with the early forms of Shiv, and from the resemblance, of his circle of guards to a rude Buddhist rail, and to the circles of unhewn stones found in western Europe and in other parts of the world, the worship of Vetal is specially interesting.

Kunbis believe in incantations, witchcraft, ghosts and evil spirits, oracles, and the evil eye. Partly perhaps because they are much more sober, partly perhaps because fever is much less common the Poona Kunbis are much less afraid of spirits than the Konkan Kunbis. [In 1819 Dr. Coates (Trans. Bom. Lit. Soe. III. 245) noticed that temperance and freedom from the use of narcotics saved the Poona Kunbi from the long and horrid train of nervous derangements from low Spirits to mania. It is these nervous derangements which in all countries have been specially believed to be spirit-caused. diseases.]

Still the belief in spirits, witchcraft, and the evil eye has a great effect on the lives of Poona Kunbis. If a Kunbi is seized with uncommon sickness, or suffers from any calamity, he first finds out whether his misfortunes are due to natural causes, to the displeasure of the gods, to witchcraft, to the evil eye, or to an evil spirit. To find out the cause the sufferer and his friends make several experiments. A flower is stuck on the breast of an idol and its fall on one side or the other determines the cause of the misfortune, or a sacrificial vessel is hung by a string, and, as is agreed beforehand, the direction to which it points when it comes to rest settles the cause of the evil. If these trials are not satisfactory & janta or knowing man is asked. If the evil has come from the gods the knowing man says how the gods are to be pleased; if the cause is witchcraft, either the knowing man breaks the spell by counter charms, or the witch is caught and either forced to remove the spell or made to drink water from the hands of a cobbler which destroys her power, if the cause is the evil eye, either the knowing man breaks the spell, or the mother of the sick child throws salt and red pepper into the fire saying, Drisht-misht ali gelichi, Bhutkhet papi chandalachi that is, The evil eye of passers-bye; Of evil sprites and filthy wights.' The evil eye is much feared. The owner of the eye is not thought to blame, but he is shunned and cattle are not driven past his door. To draw the evil eye from the crops a whitewashed pot is stuck on a pole; the walls of houses are decked with figures and gaudy stripes; beautiful women and children wear necklaces, and cattle wear necklaces and anklets. A Kunbi never congratulates a friend on his prosperity, his fine oxen, or his handsome wife. If he does, Ill-luck will hear and carry away the excess of good fortune. Every place teems with ghosts and evil spirits, who are included under the general term bhut, literally a being. The male ghosts are called Keins or Jhotings, and the female ghosts Hadals. Among the worst female ghosts are the seven water-nymphs called Aija or Jaldevtas, who carry off handsome youths. There are distinct names for the ghosts of Brahmans, Musalmans, and outcastes. A ghost wanders and ill-uses the living either because he was murdered or illtreated, or because he hankers after a house, a wife, or a treasure. Ghosts live in large trees, lonely places, empty houses, and old wells. They are generally seen or heard at noon and at mid-night. They take many shapes, a deer, a tall figure, or a strange ox or goat. If a person sleeps under a haunted tree, or cuts a branch of a haunted tree, or defiles the ghost's ruin or old wall, or jostles a ghost on a road, the person sickens or is unlucky. The ghosts of the murdered or the illused are chiefly dangerous to those who ill-treated them. The ghost enters into the culprit, maddens him, destroys his sleep, kills his family, and turns his joy to sorrow. Many people make a living by

appeasing or casting out angry spirits. One plan is for the exerciser to take the possessed person in front of an idol, to seize him by the top-knot, scourge him, and abuse him till the spirit says what offering or penance will satisfy him. [These details are from Dr. Coates' Paper on the Village of Loni in 1819 (Trans Bom. Lit. Sec. III. 210-220). The account still truly represents the belief and practices of the Poona Kunbi.]

The Kunbis' chief holidays are *Holi* in March, *Nagpanchmi in July*, *Gauri* and Pola in August, Dasara in October, and Divali in November. Holi, also called Shimga, lasts five days. Both old and young look forward to it with delight. It is ushered in by boys and men making a loud bawling, broken at intervals by stopping the mouth with the back of the hand, and calling the names of the male and female organs. Cowdung cakes for the bonfire are stolen wherever they can be found. On the evening of the full-moon the men of the village form two gatherings, the Kunbis and the bulk of the people at the village office, and the Mhars and other men of low caste by themselves in their own quarter. In front of the village office a spot is swept clean and sprinkled with water. In the centre the stem of a sugarcane and of a castor plant are stuck in the ground and round them dried cowdung cakes are piled six to seven feet high. The heap is called *Hutashani* or the offering-sater that is fire. The people sit round the heap in a ring and the headman with the help of the priest worships the heap and offers grain and flowers. The chief offering is a cake, the presenting of which is one of the chief headman's most prized rights. The pile is kindled from the Mhars' bonfire. Stealing the Mhars' fire is a work of some risk as the Mhars are on the look-out and throw burning brands at the thief. The fire is put into the headman's hands, who lights the pile and walks thrice round it calling out, Phoda, phoda, jhavla, that is the female organ is united. Then till morning follow songs and dances, in which boys dressed like dancing girls take the place of women. The favourite dance known as the *tipria* on baton-dance is performed by twenty to thirty young *men* moving in a circle to the sound of a drum and pipe, each armed with a piece of seasoned wood about a foot long which they clash against the sticks alternately of the dancers before and behind them. Besides dancing they play games, the Tiger and Sheep, the Fox and Dog, and Prisoner's Base. The next day is known as the Dhulvadicha Divas or the Dust Day, because the people throw dust on each other. This is the Kunbi's field new year's day. Each family of Kunbis goes to the village god with a metal plate on which rice is strewn. On the rice is a water-pot and at the mouth of the water-pot a cocoanut and betel leaves. The plate is held before the village god and the cocoanut is broken and the shell given to the god.

During the three remaining days of the Holi, men and boys meet in groups, some in fantastic dresses throwing dust and mud. Women, who seldom appear, are saluted with obscene speeches and men of rank with coarse jests. Some go outside of the village to Vetal's stone, the patron of wrestlers, and there wrestle and perform feats of strength. About noon they bathe, feast, and sleep, and in the evening dance and play games. The *Holi* ends on the fifth, which is known as Rangpanchmi or Colour-fifth. The colour is pink. It is made by adding an alkaline salt to a decoction of palas Butea frondosa flowers, mixing them in water, and throwing the water over each other from pots and syringes. They also dust each other with a red flour. On this day women share in the fun. They carry branches of the castor plant and lay hold of the headman or other rich villagers and plague them till they give a post or present. [Trans. Bom. Lit, Soc, III. 221, 223.] Nagpanchmi or the Cobra's Fifth in July is the Kunbi woman's festival. In the after, noon all the women, dressed in their best, go with music to a white ant-hill in which a cobra is believed to live, and lay milk and sugar near the ant-hill while the priest says prayers. The women take hands, dance round the ant-hill in a ring alternately rising and kneeling and keeping time to a song which they sing in chorus. At intervals they take parched rice in a clenched hand, and putting it on each other's heads ask their husband's name. As they may not answer directly they bring in his name in a rhyme. [Trans. Bom. Lit. Soc. III, 231.] At the Gauri festival in August the women paint on paper a figure of the goddess, who is the same as Lakshmi, worship the figure, and feast. Trans. Bom. Lit. Soc. III. 231. At the August *Pola* the oxen have a rest. Their horns are covered with tinsel or red, and palas fibre tassels are tied to their tips. Garlands of flowers are put round their necks, they are fed with sugar, and their owners fall at their feet and worship them. In the evening, after the headman's cattle, all the oxen are driven round Hanuman's temple. The day ends with a feast. [Trans.] Bom. Lit. Soc. III 225.] Dasara falls on the bright tenth of Ashvin, generally in October. It is believed to mark Bhavani's defeat of the buffalo-demon Mahishasur. The first to the ninth are a time of mourning, during which the goddess is not disturbed by prayers or vows. On the first day with music the people go to Bhavani's temple and make offerings and the priest sows eighteen grains in front of the goddess. From the first to the tenth, both near the temple image and the house image of Bhavani, a garland is hung by some one who abstains from grain, batter, and animal food. The tenth is a day of rejoicing; all wear new clothes, dress in their gayest, and feast on mutton. In the forenoon all iron weapons and tools are brought out and worshipped. Horses are bathed and dressed with flowers, and a sheep is sacrified to them and its blood sprinkled over them. In the

evening all put in their turban some plants of the grain which was sown before the village Bhavani, and with music they go to the village boundary worship the apta tree Bauhinia tomentosa. They cross the boundary and pluck some stalks of grain, and on their return offer apta leaves, which are called gold, and ears of corn to the village gods and then exchange them among their friends. A male buffalo is sometimes sacrificed. Trans. Bom. Lit. Soc; III. 224. Sir John Malcolm, in a letter from Poona 24th November 1799 (Trans. Bom. Lit. Soc. III. 79-96), gives some further details of the *Dasara* rites observed by the Poona Marathas and Brahmans. On the first night a kalash or jar, either of brass or earth, is set up as the symbol (or dwelling) of the goddess Bhavani. Offerings are made to girls between two and nine years of age. On the first night combs are given; on the second sweet oil, mirrors, and glass; on the third turmeric, safflower, and henna; on the fourth day antimony, sweet cakes, and fruit; on the fifth sandal and other sweet oils and an image of Chandika, an early form of Bhavani, is put under a tulsi bush; on the seventh Sarasvati is worshipped; on the last day prayers are addressed to all things wanted for war, among others to the umbrella the horse, the flagstaff, the elephant, the sword, the bow and arrow the mother of arms, and guns and cannon. At the end of the ninth day Bhavani's jar is throw into water. On the tenth day all go north-east to a shami tree. Soldiers shoot arrows as the tree, and they put some leaves in their turban and come back. Kings and chiefs should lead their troops to the verge of the city and worship the shami tree. By this act small-pox, famine, and other evils are driven beyond the borders. The peshwas moved out to a camp near Poona with all his chiefs, each under his banner, on his beat horse and in his richest clothes. All the people of Poona joined and marched to the sacred tree. The Peshwa, after prayers and offerings, plucked some leaves, cannon and musketry fired a salute, the state accounts were produced and sealed, the Peshwa plucked a stalk of millet from a field, and the whole crowd firing guns or shoot ingarrows rushed into the field each striving to get a stalk of millet. All shout and spend the rest of the day in feasting and mirth. A buffalo decked with flowers and daubed with paint is brought before the chief's horse or elephant, and his head is struck off with one blow and his blood in sprinkled with great ceremony over the his head horses. In smaller towns the buffalo is led round the town, grain and and liquor are sprinkled as the procession goes and when the round is ended the buffalo's head is cut off, sheep are sacrificed, and the flesh is eaten by all but Brahmans. Divali comes twenty days after Dasara. It lasts three days with feasting, lighting, and fireworks. Oil is burnt in earthen cups which are placed in front of village temples, public buildings, and houses. Boys let off crackers and the rich burn all kinds

of fireworks. According to the story when Mahadev killed the demon Narkasur, he agreed that in his honour there should be a yearly light feast. It is the native bankers' and merchants' new year. [Trans. Bom. Lit. Soc. III. 225. Besides these main festivals many field rites are practised by Poona Kunbis. About the end of April on the Akshatritia, literally the undying third, offerings are made to three generations of dead warriors and a fresh year of field work begins. [Dr. Coates in Tran. Bom, Lit. Soc. III. 256; Mr. J. G. Moore, C. S. In the east of the district, before beginning to plough waste land, cooked rice or fine millet or Indian millet cakes, curds, a cocoanut, and a he-goat or fowl are offered to the field spirit, Mhasoba, Navlai, or Satvai. This is not done in the west of the district. In the east, before beginning to sow, each of the village gods, Maruti, Bahiroba, and Ganpati, is given a handful of grain. This is not done in the west. In the west, when the rice seedlings are ready to plant, the villagers meet on a Sunday, anoint their village god, who is generally Bahiroba or Hanuman, with oil and redlead, sacrifice a he-goat and ten fowls, and offer five cocoanuts, frankincense, fifteen lemons, and camphor. They ask the god to give them good crops, and walk round the village calling the name of their god, A feast is prepared and the sacrifices are eaten near the temple. Each landholder on the Tuesday before he begins to plant his rice kills a fowl and sprinkles its blood over the field and offers the field spirit a cocoanut, some sweetmeats, and five lemons, and burns frankincense and camphor. Before beginning to make ready the threshing-floor some husbandmen offer Mhasoba, Maylai, or Satvai millet-cakes, curds, a cocoanut, and a he-goat or fowl. Before setting up the tivda or central pole of the threshing-floor all ask an astrologer what wood they should use. Under the pole they bury mango, jambhul, shami Mimosa shamu, arati and rui Calotropis gigantea twigs and an egg. They set up as a shrine or devsthan an earthen pot and seven pebbles, five for the Pandavs and one each for Vandev or the forest god and Vanspatra or the forest lord. The pot and the pebbles are smeared with redlead and frankingense is burnt before them. Kunbis sacrifice a sheep or a he-goat; a Brahman or Gujarat Vani would offer five grains of wheat or five millet cakes and five each of betel, cloves, cardamums, turmeric roots, and pieces of cocoa-kernel. When the grain is thrashed some husbandmen offer a sheep, a goat, a fowl, or cakes. Before winnowing an animal or cakes and fruit are offered at the Panday shrine. Rice is also offered and scattered over the threshing floor, a rite known as *raspuja*, that is the heap-worship. When an animal is offered the rice is steeped with blood before it is thrown. Before Measuring the grain the astrologer is asked which of the husband-man's family should measure, it. With a broom of early *ivari* stalks the grain is heaped round the central pole and incense is

burned before it, a two-sher or adholi measure is held in the incense smoke and handed to the measurer, who offers the first measureful to the village god. If a crop is attacked by rust, in some parts of the district a fowl is sacrificed or a cocoanut is offered to the village deity. At all these rites the village priest is present, recites texts and is given a cocoanut or a few coppers. [Mr. J. G. Moore, C. S.] Their priests are the ordinary Maratha Brahmans to whom they pay great respect. They make pilgrimages to Alandi, Benares, Nasik and Pandharpur. [In 1819] Dr. Coates wrote: The Kunbis are sincere and devout. Their rules enjoin charity, benevolence, and reverence to parents, and have a wholesome influence on their conduct. They are nominally followers of Mahadev, but join in the worship of any sect that comes in their way. They constantly make vows at Musalmans and occasionally at Christian tombs. Their chief objects of worship are Khandu and Bairu local Mahadevs, and Jamni, Yamni, and Tukia local Parvatis. Every family has two or more gold or silver relief plates of these gods, about four inches high by two broad. They are the house gods and are kept in a stand in some safe part of the dwelling. Every morning one of the family, generally the grandmother, bathes and anoints the images, lays grain before them, and burns frankincense. Before staring on his day's work each member of the family comes and with a low bow prays for strength for the day's labour, safety for the family and cattle, and the days bread. People who are too poor to marry, who are out of work, sick, or unlucky their friends and go to some temple and vow if the evil is removed to swing before the god with hooks in their black, to roll on the ground in front of the god, to come before him in chains, to offer him a sheep goat or fowl or sweetmeats or a cocoanut.]

The first five months of a woman's pregnancy are known as the months of longing or dohole. She longs to eat tamarinds, cakes bread, ambada or Spondias mangifera, pot-herbs, fish, and flesh. If she is refused the child is born with unhealthy ears. After deliverey the position of the woman is not changed for some time. [In 1819 Dr. Coates (Trans. Bom. Lit. Soc. III. 245) described the Kunbi women at child-birth as shut in a close hole without air or light, and a lamp, generally a char-coal lamp, burning. She was fed with spices and other stimulating food and often suffered from fever and rheumatism, If the child is a boy the midwife beats a metal-pot and is paid 3d. to 6d. (2-4) as.); if the child is a girl the father is told without any sign of rejoicing and the midwife is paid about $1\frac{1}{2}d$. (1 a.). The father notes the time of birth that the Brahman astrologer may be able to choose a lucky name. The midwife cuts the child's navel cord with a knife and holding the cord in her left hand passes it through the child's mouth. She touches the spot where the navel cord was cut with ashes and rubs the

mother and the child with turmeric and oil, bathes them in hot water, and swathes the child in cloth bandages. The mother is given butter and myrrh pills and the child is dosed with three or four drops of castor oil. The mother is fumigated by burning vavading Embelia ribes, ova Ligusticum aiwaen, and balantshep Anethum graveolus in the room, and then, with her child beside her, is laid on a cot under which a small fire of live coal is set. The mother is fed on fine rice, butter, pepper, and warm water. Near the door of the room an earthen pot of cow's urine is set with a nim branch floating on it. That no evil spirit may come in with them all visitors sprinkle a few drops of cow's urine on their feet before entering the room. At noon the mother is bathed in hot water and elderly women begin to drop in and ask how she is. If the child is a boy they congratulate her warmly; if it is a girl, they say The first daughter is bread and butter, pahili beti tup-roti. If the child's aunt is present at the time of delivery she cowdungs the threshold of the room, places a packet of betelnut and leaves near it, and says looking towards the child, 'This child is to be my son's wife.' The mother smiles, and if she has a son says, 'When you get a daughter she will become my daughter-in-law.' In the evening the mother is again bathed, nim juice is given her to drink, and she is fed as in the morning on rice, butter, and pepper, and is given some hot water to drink. The child as before is dosed with three or four drops of castor oil, and laid by the mother's side on the cot. A lamp is kept burning during the night, and next morning, after rubbing them with turmeric and oil, both mother and child are bathed, the mother is fumigated with, vishesh or frankincense, and the child is given a dose of castor oil. The mother takes some *nim* juice, has a meal of rice, butter, and pepper, and is given some hot water to drink. At noon women neighbours and kinswomen begin to drop in. As each comes she touches the soles of her feet as if taking a pinch of dust off them, waves it round the child, and blows the dust partly into the air and partly into the ground. Then cracking the finger joints of both her hands, she takes her seat, and is given turmeric and redpowder. Should she be unlucky enough not to crack all her finger joints, she is thought to have no friendly feelings to the mother and child, and is not given the powder. In the evening if the child takes to crying, frankincense is burnt in the names of Bahiroba and the goddess Satvai, and they are prayed to save the child and prolong its life. On the third and fourth days, except bathing the mother in hot water, nothing particular is done. On the morning of the fifth day the following articles are brought: A cocoanut, five pieces of cocoa-kernel, five dry dates, five grains of pepper, dry ginger, poppy, cardamums, cloves, nutmeg, betelnut and leaves, catechu, scented and redpowders, tooth-powder, a coloured cord with a small parcel of red

and scented powder or nada-pudi, frankincense, turmeric, and a small copper or brass image of Satvai. Dishes of mutton and rice flour balls are cooked and kinspeople and friends are asked to a feast. The women quests bring with them on a brass plate a few grains of rice, a cocoanut, and betel leaves, and set them before the goddess Satvai. Then the child's grandmother or some other elderly woman of the house sets a low wooden stool in the lying-in room and places the image of Satvai on the stool. She sprinkles redpowder on the image, burns frankincense, offers fruit and cooked food, and, wrapping the child in a cloth, lays it before the goddess and prays her to accept the offerings, to be kind to the child, and to overlook any shortcomings in the worship. The mother comes forward, bows before the image, and eats of all the dishes. The other women bow before the goddess, and after eating return to their homes. When the women have gone the men begin to drop in. As they come they are seated on blankets and dinner is served. After dinner a pipe of tobacco is handed round, first to the patil, then to the senior guest, and then to the rest, except to youths who must go out if they want to smoke, singing, smoking, and drinking go on till morning, when all go home. Next morning the mother and child are rubbed with cocoanut oil and bathed in warm water, and she goes back to her special diet of rice, butter, pepper, and hot water. On the morning of the seventh day the cot and the earthen water-pot are smeared with red-powder and turmeric, five lighted rice flour lamps are placed in the water-pot, and cooked food is offered. Five unmarried girls are rubbed with redpowder and turmeric and their laps are filled with wet gram, a piece of cocoa-kernel, betel leaves and nuts, and small balls of powdered ginger mixed with molasses. After the mother has prostrated herself five times and bowed thrice before the girls a dinner is served to one or two women neighbours. On the morning of the eighth day the mother and child are bathed, and after eating her usual special food she is given betel leaves and nut to chew and a dish of live coals is placed under her cot. Cocoa-kernel and dry date kharik are pounded together and mixed with molasses, and a little is given to the mother and the rest is distributed among the neighbours. On the ninth day, except that the mother is bathed with hot water, nothing particular is done. On the tenth day two or three women come and wash all the clothes and bedding and in return are given breakfast. All the house walls and floors get a fresh plaster of cowdung, and, when the songsters come, cow's urine is sprinkled on their bodies and clothes. Then they, together with the house-people, feast on bread, relishes, white shepu or Anethum foenicatum, and green chillies. On the eleventh day preparations are made for the twelfth-day ceremony. Articles are laid in and the Brahman priest and guests are invited.

On the morning of the twelfth day the women of the house bathe the mother and again purify the walls and floor of the house with a plaster of cowdung. They bake some cakes and begin to cook dishes of rice, vegetables, and pulse. A goat is killed, and its blood is gathered in a metal plate and mixed with spices and boiling water. This dish is called rakti. The bones and flesh are cooked in two separate pots and the liver or *kaling* in the third. A girl goes to tell the neighbours that the feast is ready, and when a few women have come the mother goes along with them to a spot outside the village and makes offerings to Satvai. On their return a bangle-seller puts green bangles round the mother's and black bangles round the midwife's wriests. Men guests have by this time begun to drop in, and, as they come, are seated on blankets spread in the veranda. The Brahman priest next arrives with his almanac, and he too takes his seat in the veranda. The women of the house tell the Brahman the day and time at which the child was born, and he, spreading his almanac before him and counting his fingers, gives the child a name, and tells his fortune. The child is dressed in a new frock and cap. Soot is rubbed of his cheeks and eyelids, and he is set facing the east. The priest is given about two pounds (1 sher) of rice, and split pulse, a little molasses, and betelnut and leaves. A cradle is hung from the ceiling, and worshipped, turmeric and redpowder are thrown over it, cooked food is offered, and a blanket is spread in it with some wet grain and betelnut and leaves in the corners and a string tied in the middle. The mother sits near the cradle, and each of the neighbour women gives her redpowder and turmeric and presents the child with a frock, a cap, and a cocoanut. They dress the child and lay it in the cradle, and as they rock the cradle they sing songs. The mother lifts the child, and turning it thrice round the cradle they say, 'Take Harpal and give Gopal, take Govind and give Krishna, take Mahadev and give Ram, take Bharat and give Shatrughna.' The child is then laid in the cradle, and one of the women, the rest all the time slapping her on the back, pats her mouth close to the child's ear, and says,' Quietly quietly receive pulse and take Somji, the name given to the child, Patel to play'. [The Marathi runs: Chup chup ghugarya ghya ani amche Somji Patlas khelayas] Then the mother's lap is filled with a cocoanut, rice, glass beads, turmeric, pieces of cocoa-kernel, and betelnut, and she is taken to bow to the family gods. A piece of thread is tied round the child's loins and the guests are feasted, the men and the women in separate rooms. After they have done they are given betelnut and leaves, wet pulse, and rice cakes. When the quests begin to leave an old man and woman seat themselves in the doorway and refuse to let the women pass till each mentions her husband's name. After some coquetting the

boldest of the women repeats some verses in which her husband's name occurs. The couplets are,

I was walking tinkling, I was looking through the window, Whose stately form is this, The son of Abaji my sister-in-law's younger brother. [The Marathi runs: Jhunuk jhunuk jat hote, khidki vate pahat hote, ha daulkondcha, Abdjichya potcha, vhanjichya pathcha.]

Or, Balu Patel of the big round turban he is my husband. [Chakrimunddsdche Balu Patel bhratar mhanje amche,]

Or, A golden winnowing fan broidered with pearls, the queen of Krishnaji Chavgula is at play. [Sonynachi supli, motyane gumplai, Krishnaji Chaugulyachi rani khelayas guntli.]

Or, A jar of molasses with a lid of clarified butter, Santu barber's wife is the fairest of gems. [Guldchya ghdgarila tupache lipan, Santu Nhavyachi bayako lai nami ratan.]

Or, A red checkered robe with nine lakhs of strings, however many mistresses you may have there is none like the queen of Vithu carpenter. [Tadpadari pasodi tila navu lakh dashi, kiti bhogilya bataki dani tari Vithu Sutarachi khashi.]

Or, To a basil plant before the door handfuls of water, At first I was my parents' pet and then the queen of Bhiva Kumbhar. [Dari hoti tulas tila vanjal vanjal pani, adhi hole dibapachi tanhi, mag jale Bhiva Kumbharachi rani.]

If among the matrons an unmarried girl is stopped by mistake she says,

Behind the door was a niche and in the niche there was wheat; my parents have not married me, whose name can I take. [Daramage hota kondda tyant hota gahu, dibdpani lagan kele nahi nav konache gheu?]

On the thirteenth day the mother begins to go about the house, washing, cooking, and cleaning as usual. Except on the full and new moon the child is bathed every day. When two months old, as a safeguard against liver disease, the mother gives the child 'tooth-powder mixed with cow's milk and liquor, and rubs its stomach with black nut and ashes, while a sorcerer says a charm or a mystic verse. To increase her supply of milk the mother is given rice, butter, and

split peas. When the child is three months old, to help it to hold tap its head, the mother is given a cooked goat's head and round the child's neck is hung a black thread with two black nuts or bajarbatus and an image of the goddess Satvai. In this month a black thread is tied round the child's waist and copper rings are put on its feat, and to ward off the evil eye the eyelids of both the child and the mother are touched with soot. In the same month the mother and the child with other relations go to visit the shrine of the goddess Satvai, when a goat, tooth-powder, turmeric, redpowder, betelnut and leaves, soot, two cocoanuts, a robe and bodice, some grains of rice, dry cocoakernel, and frankincense are offered to the goddess and the goat is killed before her. The head is placed behind the goddess and the body is taken away, presented to the goddess, cooked, and eaten. The temple priest or ministrant tells the goddess the reason of the offering, and, taking a pinch of ashes, rubs them on the brow of the child and of its mother. After feasting on the flesh of the goat and on other dishes, the party bay back the goat's head paying 1½d to 6d. (1-4 as.), and go home. All the religions parts of this ceremony are performed by the temple servant who is generally a Gurav by caste. On reaching the house the mother and child stand at the door, and a woman comes from the house and waves a piece of bread round them and pours water over the mother's feet.

When the child is four or five months old it is bathed outside of the house, and when it is about a year old and begins to walk, its head is shaved except a tuft on the crown, and the hair is offered to the goddess Satvai. The barber gets a present of a pair of scissors; and the mother gives a feast to a party of married women. Six months later, when the child begins to eat, any flow of saliva is stopped by the mother passing an aged live fish three or four times round its face. When four years old the child begins to run about the streets and lanes and plays at marbles, bat and ball, tops, and hide and seek. After about seven the child begins to be of use to his parents, taking the cattle to graze and bringing them home in the evening. When ten or twelve years old he is branded as a cowherd either on the right or left hand or on both hands. A few pellets of hare's dung are brought from a hill, pounded, and set in four or five places about the boy's wrist and burnt. The other boys hold the child so as to keep him guiet, and when he can no longer bear the pain the burning pellets are knocked off and the skin rubbed.

At sixteen, the parents of the boy, if well-to-do, think of marrying him, or, as they say, tying a clog round his neck. The girl chosen for a wife is usually three to twelve years old. Among Kunbis it is not necessary

that a girl should be married before she reaches womanhood, and among men though if well-to-do they may be married at sixteen, it often happens that in large or poor families the younger sons remain unmarried till well on in life. Before a marriage can be fixed it must be ascertained that the boy and the girl are not same clan or cul; they may both bear the same surname but the crest or devak must be different. Sameness of stock in the female line is no ground for objection. After talking the matter over and fixing on the most suitable girl, the boy's father goes to a Brahman, tell him of the object of his visit, and asks him to say when he ought to start to make his offer to the girl's parents. The Brahman gets his almanac from the house and sets it before him, and the boy's father, laying a betelnut and a copper coin on the book and bowing to it, sits in front of the Brahman. The Brahman takes the betelnut and the coin, opens the almanac, counts his fingers, and tells the boy's father that the whole of that and the next day are lucky and that his errand will be successful. The father bows and withdraws. Next morning, he dresses in his best waistcloth, shouldercloth, turban, and sandals, ties together a few cakes and some vegetables, and with one or two kinspeople starts for the girl's house. Before leaving he looks about him. If he sees a married woman or a cow he thinks it lucky and starts, if a Brahman or a widow happens to pass he goes back and stops for some time on his veranda before he makes a fresh start. When the father and his companions reach the girl's, he makes over the bundle of refreshments to the women of the house. A blanket is spread and the quests are asked to sit. They are given a pipe of tobacco and water to wash their feet and are asked to dine. While dining the women from behind the door ask them why they have come. They say,' We have come to sweeten your child's mouth; it rests with you to carry out our wishes.' They then take a nap. In the evening when the men come home they talk the matter over, the women joining in the talk from behind the door. The girl's father says, ' It is of no use marrying the girl, she is too young, she is still a child, and has never had small-pox. The women of your house may not like her, you better look out for a wife elsewhere; and names other houses. The boy's father presses him and after a time he agrees, and as a sign of agreement the two fathers dine from the same plate. Next morning the boy's father goes to the village astrologer, lays a betelnut and a copper coin on his almanac, and tells him the boy's and girl's names. The Brahman as before consults his almanac, counts his fingers, says that the stars favour the marriage, and fixes the next day for the sugar and rice or *gulbhat* feast. The boy's father sends word to the girl's house and goes home. Soon after the girl's father goes to the boy's father and asks him and his relations to come next day to a sugar and rice feast at his house. At the same

time they settle what presents each is to make to the other's child; that the boy's father should not take more than five or six men to dine with him during marriage dinners; that 30s. (Rs. 15) should be paid as dowry or dei to the girl's father a month before the marriage day; and lastly that some of the girl's relations should be present when her wedding clothes are bought. When these points are settled the girl's father goes home. Next day the boy's father and some of his relations, taking earrings a robe and bodice a cocoanut and betel go to the girl's, and, before dining, make over the presents to the women of the house, asking them to put the ornaments in the girl's ears, to dress her in the robe and bodice, and to lay the cocoanut and betel before the house gods. Then the sugar and rice dinner begins. When the quests are seated one of them asks the girl's father why the dinner is given. To this one of the leading guests, perhaps the patil, answers that the dinner is given because the host, naming him, has given his daughter to so-and-so's son. Then, after the girl's father has been asked and has answered that what the patil says is true, the boy's father is asked what ornaments he has given. He names them, adding that it has been settled that the robe should be worth 30s. (Rs. 15) and should be bought in presence of the girl's relations; that not more than five or six men should be taken to dinner; that at least one month before the marriage 30s. (Rs. 15) on account of dowry or dei should be sent to the girl's parents; and that the girls' parents are to give the boy a sash and a turban together worth 10s. (Rs.5), and 7s. (Rs.3½) on account of a metal bathing tub and pot. When all these points have been publicly settled they begin to eat, and at the end of the feast, after a pipe and betelnut, they go home. The boy's father before leaving asks the girl's father to dine next day at his house. When the girl's father and his friends arrive, the boy is brought forward and shown to the quests, one of the old women of the house remarking how fine-looking and healthy he is, and adding, 'We have shown our boy to you, but we have not yet, seen your girl. We hope your girl is as handsome as our boy. Then the boy is bathed and dressed, and his brow is marked with sandal, and the girl's father, who has brought a bodice, a cocoanut, and betelnut and leaves, gives them to the women of the house telling them to lay them before the house gods and to give the bodice to the boy's grandmother. Dinner is served, and just as at the girl's house, the form of naming the marriage presents is gone through. When dinner is over the guests leave, the boy's fathers being warned that little time is left, and that he should be ready, referring to the £1 10s. (Rs.15) he has to pay as purchase-money or dowry.

From this time the marriage preparations are pressed on. The boy's father pays the girl's father the £110s. (Rs. 15) in presence of a couple of witnesses and next morning both men and women go to the market and buy clothes. When they return the Brahman priest is sent for. When he comes he is seated on a blanket with his almanac spread before him and asked to fix a lucky day for the wedding. After consulting his almanac and counting his fingers, the Brahman says, 'Wednesday morning is the best time for the turmeric-rubbing; an hour before sunset is the luckiest time for the wedding; and Thursday night for the marriage procession.' The boy's father sends a message to that effect to the girl's parents and send to ask kinspeople, friends, and castemen. The shoemaker is told to make a new pair of shoes for the boy, and the potter to bring earthen pots on the morning of the marriage day. The boy's fathal goes to his neighbours and asks them to help him to build a marriage booth in front of his house. He brings bunches of mango leave, and hangs them about the booth, keeping a bough for the lucky pillar or muhurt-medh which is planted on the marriage day. Except that an altar is built at the girl's house, the preparations at both houses are the same. In the evening, both at the boy's and at the girl's, wet pulse, turmeric, redpowder, betelnut and leave, cocoanuts, and dry cocoa-kernel, dry dates, and two bundles of thread, worth altogether 2s. 6d. (Rs. 1¼) are laid in. The details are: Pulse, turmeric, and betelnut about 9d. (6 as.); cocoanuts and kernel, 1s. 9d. (14 as.); thread, $1\frac{1}{2}$ (1 anna). Musicians are called and for two days' playing are paid about 1s. 6d. (12 as.). Early on the wedding morning at the girl's house the millstones are washed and turmeric is ground into fine powder. A piece of cloth is dipped in turmeric, and a few grains of rice, a betelnut, and a tamarind root are laid in the cloth and tied to the neck of the millstone which is not used till the marriage ceremony is ever. A low wooden stool is set in the doorway and round the stool five metal water-pots are arranged and a thread is passed five times round them. Some betelnuts and a few grains of rice are laid in the girl's hands, and a metal pot filled with cold water in the hands of the bridesmaid or karavli, and the two go round the pots five times. Then the bridesmaid, walking behind the girl, pours a little water on the low wooden stool, and the girl five times drops a few grains of rice on the water, and setting first her right foot and then her left foot on the stool sits on it. Her head is rubbed with oil and she is bathed. While this goes on the girl bathes a number of little children who stand in front of her and the musicians from time to time play their pipes. When all the children have been bathed the girl's mother comes forward, and, sitting close to her daughter on the low wooden stool, is bathed. When the bath is over the mother is presented with a robe and bodice, and, if she is not a widow, her arms are rubbed with

turmeric and redpowder is rubbed on her brow and a cocoanut and rice are laid in her lap. The girl is dressed in a robe and green bodice and her clothes are stained with wet turmeric, her forehead is daubed with redpowder and rice, her cheeks and the space between the eyebrows are marked with soot, and in her lap are laid a cocoanut, five dry cocoa-kernels, five betelnuts, five turmeric roots, and some grains of wheat. After this a chaplet, either of flowers or of tinsel, is tied round her brow, and her head is covered with a blanket. Without letting the cotton thread that encircles them touch the girl, four women stand with water-pots in their hands, and a fifth looses one end of the thread and ties it to the lucky pillar or muhurt-medh, and plants the post on one side of the doorway. By this time, at the boy's house, the Brahman priest has come, and is given a cocoanut, pieces of cocoakernel, thread, turmeric, a piece of yellow cloth, a winnowing fan, and rice. The priest sets two lighted lamps on a low wooden stool, and between the two lamps a bathing tub or ghangal. He picks up a winnowing fan, lays grains of rice in it, and filling a metal water-pot with cold water sets it on the rice. He spreads a few mango leaves on the water-pot or sets a cocoanut on it. He ties in a yellow cloth a few grains of rice, and some betelnut and turmeric. He daubs the bundle with redpowder and lays it in the winnowing fan beside the water-pot. The priest opens his almanac at a picture of Ganpati, tells the host to worship the picture, repeats verses, and the host sprinkles over the picture sandal rice and red and scented powder, lays betelnut and leaves and a copper coin before it, offers it sugar, and bows to it. When the worship of Ganpati is over the priest rolls up his almanac and lays it beside him. Then, after worshipping the winnowing fan and its contents and seeing that it is kept in a safe place, the priest goes home. A near relation of the girl, taking turmeric powder and accompanied by music, goes to the boy's house, makes over the turmeric to the people of the house and returns. The boy is seated on a low wooden stool in the midst of the five earthen pots, bathed, and dressed in a new waistcloth, a turban, and a shouldercloth. His forehead, like the girl's forehead, is marked with redpowder, and over the powder a few grains of rice are stuck. A tinsel chaplet is tied to his brow, and, as at the girl's house, the thread that was wound round the earthen pots is tied to the lucky pillar or muhurt-medh. The village barbers lay a cloth on the grinding stone or pata, and worship it by laying grains of rice before it. To the wooden pestle or *musal* are then tied a betel leaf, a millet stalk, and a needle, and it is set in the mortar. The women of the house seat the boy in front of the mortar on a low wooden stool, take cocoanut oil in a metal cup, and dipping mango leaves in the oil let it drop on his head. The washerwoman, holding the pestle in her left hand, stands in front of the boy singing

songs. A chaplet of flowers, a cocoanut, and a few grains of wet pulse are sent to the village god with the prayer that he may be kind, that the marriage ceremony may pass without mishap, and that he may give the marriage guests a safe return to their homes. When this is over the guests are treated to a dinner. After dinner the boy is seated either on a horse or a bullock, and, with about twice as many male and female relations and friends as he promised to bring, goes with music to the girl's village temple, where he lays a cocoanut before the village god and asks his blessing. After leaving the temple, the boy goes to the boundary of the girl's village.

On reaching the boundary a lemon is cut, waved round the boy's head, and thrown away, and his eyes are touched with cold water. One of the company going to the girl's house tells her father that the boy and his party are come. Then the girl's near relations and the chief men of the village go to meet the boy. At first the girl's brothers and uncles refuse to let him pass the village boundary. After a while they are given cocoanuts, betel nuts and leaves are handed round, they embrace, and while the musicians of both parties play their pipes, the boy and his friends are hurried to the village temple where he lays betelnut and leaves before the god and worships. He is then seated on a blanket spread outside of the temple. The village Mhar brings a horse and on it the boy is seated, and with music is led to the door of the girl's marriage hall. A ball of rice is waved over the boy's head and thrown on one side, and his eyelids are touched with water. Next the village barber comes, unrobes the boy, and bathes him in warm water. The girl's father dresses him in a new waistcloth, turban, and shouldercloth or shela, and the clothes the boy was wearing are given to the barber. Meanwhile three or four Brahmans draw red lines on the outer wall of the house near which the boy is seated, and the girl, dressed in a fine robe and her lap filled with a cocoanut a handful of wheat and a piece of cocoa-kernl, is taken outside and seated on the boy's left. The flower chaplets are taken off the boy and girl and thrown on the house-top or the roof of the marriage hall and new ones are tied to their brows. Toe-rings are put on the girl's feet and she is dressed in a bodice turned fore end backwards, badishep Anetham foenicatum is put in their mouths, yellow lines are drawn on a waistcloth, the boy and girl are set facing each other, and the waistcloth with the yellow lines is held between them. The villagers hold drawn swords over their heads and the guests and relations who surround the pair are each given a few grains of rice and warned not to sneeze, talk, or cough. Behind the girl stands her sister with lighted lamp in her hand, and behind the boy his brother with a lemon stuck on the point of a dagger. The Brahman repeats verses and at the end

of the verses asks the girl's father to whose house he has given his daughter and he names the boy's father. Then both fathers are asked,' Have you both with free will given and received the girl;' and they reply, 'We have.' The guests throw rice over the couple, the musicians play, and the Brahmans are given money. The boy and girl are seated on the altar close to each other, the girl on the boy's left. Next the Brahman priest takes a metal plate and lays on it a lighted lamp and a handful of rice. A married woman takes some rice in both her hands and throws it on the knees, shoulders, and heads of the boy and girl, three times over the boy and twice over the girl. A copper coin is laid in the dish and the musicians play and sing songs. A new bathing tub or *qhangal* and water-pot or *tambya* are brought and filled with water and the girl's father pours water from the tub over the boy's feet. These pots, together with a turban, a waistcloth, and a bodice or robe are presented to the boy, and this concludes the ceremony. The Brahmans from both houses are presented with 5s. (Rs. 2½) and the guests with betelnut. The hems of the boy's and girl's clothes are tied together by the girl's sister, and they are led into the house. They bow before the family gods, and the boy takes one of the gods and hands it to his brother. On their return to the wedding booth they are seated on the altar, the girl to the left of the boy. The girl's mother brings a bathing tub or ghangal and cooked food and sets them before the boy. She covers the food with a new winnowing fan, and over the fan sets, a lighted lamp, a cocoanut, and betelnut and leaves. The boy's relations come with a bodice and lay it near the betelnut on the winnowing fan. The girl's mother removes the winnowing fan with its contents and asks the boy and girl to taste the food. If the boy is the first to taste the food it is well; if he is not he is laughed at and asked whether he is going to eat his wife's leavings. When the meal is over the guests are served with a dinner, and either stay over night or go to their homes. After the guests are gone, to the wrists of both the boy and the girl turmeric roots are tied and they go to bed, the boy sleeping with the men outside and the girl with the women in the house. On the second day the boy is seated on the altar, and the girl stands behind him with turmeric powder in her hand, and tries to force some of it into his mouth. The boy keeps his mouth tight closed and tries to prevent her, and, if she succeeds in forcing some into his mouth he is laughed at and asked if he is hungry. Then the boy stands the girl, and tries with his left hand to force some turmeric into her mouth. He seldom succeeds, and is laughed at and called hijda or impotent. Next the boy holds a betelnut in his hand and naming the girl asks her to take it from him. They struggle and the girl generally manages to snatch it away. Then the girl hold a betelnut in her closed

fist and naming the boy asks him to take it. He tries but generally fails. He then begs her to let him have the nut and she gives it to him.

After this five or six betelnuts are laid in a line and a little molasses is sprinkled over each. The boy and girl watch the nuts and each tries to be first in picking the nut on which fly first settles. The one who gathers the most nuts wins. When this trial of luck is over the boy and girl are seated face to face in the marriage hall on low wooden stools and a plate full of water is set between them. Redpowder is dropped into the water, and the girl holds her open hands over it at some distance. The boy spreads his hands and the girl's sister drops from her hand into the boy's hands a piece of turmeric, a betelnut, and a ring and he in turn lets them drop into the girl's hands and she into the plate. If the ring lies in the plate more towards the boy's side he takes it, if it falls towards the girl's side he asks her to make it over to him. Then the boy puts the remains of the pounded turmeric and cooked rice into the mouths of his sisters and brothers-in-law. Next both he and the girl are bathed, served with a light meal, and given warm water to wash their hands and feet. To counteract any attack of the evil eye, a Jangam or Lingayat priest breaks the tops off two new earthen jars, whitewashes the outside of the bottoms, and fills them with ashes. He takes two sticks, rolls round each a piece of cloth soaked in oil, and lighting the oiled cloths plants them in the ashes. He decks the jars with flower garlands, gives the boy and his mother whose hair hangs loose down her back a lemon to hold, and sets one of the brokes jars on the head of the boy's mother and the other on the boy's head, and with music playing before them, and followed by the Jangam, who carries a cocoanut and an offering of cooked food, they walk to the side of some stream or pond. At intervals, as they go, the jangam takes one of the broken jars on his head, dances, and again makes it over to the boy or to his mother. When they reach the water-side the Jangam offers food to the broken jars, and with the point of the sword cuts off the burned part of the torches, and brings it home.

On their return the guests are- served with dinner. Before they begin to eat burning frankincense sticks are set in front of the boy's mother, scented powder is sprinkled over her hair, and a bathing tub or *ghangal* filled with cooked food is placed before her. the tub is covered with a winnowing fan, and a lighted lamp is placed over the fan. The mother's relations lay a bodice near the lamp is placed the girl's relations take away the winnowing fan which acts as to dine, to the bathing tub. In the place where the male guests are to dine, food is brought in a covered water-pot, and on the boy's father presenting 3d.

to 1s. (2-8 as.) the cover is removed and the contents of both pots are distributed to the quests. When dinner is over betelnut is handed and the guests withdraw. The Jangam is paid 3d, (2 as.) and is presented with, some uncooked food and a cocoanut. On the third day at the boy's house a dinner is given to relations, friends, and villagers. On the fourth the turmeric that was tied to the hands of the boy and girl and the cocoanuts that were tied to the marriage hall to the right wrists of the boy and girl are unfastened. At two at night a procession starts, flower chaplets are tied, and the girl's lap is filled. The boy and girl are seated on horseback and taken to the village temple. The people of every house they pass present the boy with molasses and water, of which he eats and drinks a little and hands the rest to his wife, who eats and drinks a little and returns what remains. When he reaches his house-door a woman comes from the house, breaks a cocoanut, waves it over the boy and girl, and throws the pieces away. On entering his house the boy and girl are taken before the house gods, bow repeatedly before them, and retire. The girl stays for four days and on the fifth is sent back to her father's, the woman who came with her receiving a bodice. About four months after the marriage the boy's father consults a Brahman, and, on a lucky day, sends to the girl's house a couple of women and a man bearing a robe and bodice, some wheat, and a cocoanut. The girl's mother receives the present, dresses the girl in the robe and bodice, fills her lap with the wheat and cocoanut, and sends her to the boy's house in charge of an elderly woman with cooked rice, vegetables, and cakes. When these gifts reach the boy's house his parents distribute the cakes and food among the villagers, and the girl's companions are kept four to seven days. This is called the house-filling or *gharbharne*. After this the girl is free to be brought at any time from her parents' to the boy's house. Widows are generally allowed to marry: but some families think widow-marriage disreputable and do not practise it. As a rule only widowers marry widows and the children do not get so large a share of the property as the children of the first marriage. Under the Peshwa, Kunbis rarely practised sati or widow-burning. Trans, Bom. Lit. Soc. III. 215.]

When a Kunbi girl comes of age, she is seated in a room by herself, and for three days neighbours and relations bring her presents of cooked food. On the fourth day she is bathed and word is sent to her parents and a cocoanut and a few grains of wheat are laid in her lap. Near relations are asked to a dinner, and when they come they present the girl with a cocoanut. In the evening the girl is sent to sleep in a separate room and the wife's brother or Other near relation leads the boy to the room and shuts him in.

When a Kunbi is on the point of death his son or his wife lays the dying man's head on their right knee, and lets a few drops of water shall into his mouth. Money and grain are given to the poor, and a cow or from 1s. to 10s. (Rs. ½ -5) in cash is given to the family Brahman, to help the flight of the soul to heaven. When the dying man has, breathed his last the women of the house raise a loud cry and dishevel their hair. A small piece of gold is put into the dead mouth, and, after an hour or two, friends and neighbours come and mourn. A near relation is sent to buy three earthen jars, cloth, betel leaves, red-powder, and bamboos, and at the burning ground the village Mhar gathers 1000 to 1500 cowdung cakes. The barber shave the chief mourner's moustache and is paid 6d. (4 as.) A fire is lighted outside of the house and rice is cooked in one earthen pot and water heated in another. The body is carried out of the house and laid on the house steps with the feet towards the roadside. The head is rubbed with butter and washed with warm water. The body is covered with a sheet or a piece of cloth, laid on the bier, and shrouded from head to foot in another sheet. On the sheet red and scented powder are sprinkled and the chief mourner is given a piece of cloth or utri to tie round his chest. He holds the jar of boiled rice in his left hand and a jar with burning live coal or cowdung cakes in his right hand and starts walking from the house. Four near relations lift the bier and follow him calling, Shriram Jayram Jayjayram. Alongside of the body near the head the wife, mother's or other near kinswoman walks by the body fanning it. After the bearers a band of kinsmen and kinswomen, the men generally bareheaded and barefooted walk joining in the cry. [Trans. Bom. Lit. Soc. III. 216] On the waynear the burning ground the bearers change places, those in front going behind and those behind coming in front. On reaching the river near the burning ground the bier is lowered, and the chief mourner dashes the jar with the burning cakes or live coal on the ground, and beats his mouth with the back of his open hand. The mourners gather the burning cakes in a heap and cover them with some cowdung cakes. Then each takes a cowdung cake and lays it on the corpse's breast. The corpse's waiststring is cut. The chief mourner sets fire to the pile, and others help him in heaping the cakes round the body. They go a little distance and sit chatting and laughing till the body is half burnt, when they bathe and go home. While the funeral party are away women smear with cowdung the whole house of mourning, they spread rice flour over the spot where the deceased breathed his last, and set a lighted lamp on it and cover the lamp with a bamboo basket. On their return the funeral party examine the spot where the rice flour is strewn to see if there are any marks like the prints of an animal's foot If the footprint of any animal, or if any mark which bears any resemblance to an animal's footprint is seen, it is

believed that the spirit of the dead has passed into the animal to which the foot belongs. On the third day the chief mourner and other relations go to the burning ground, and the chief mourner sprinkles the ashes first with water and then with cow's urine, and gathering the bones and ashes throws them into the river. He make an earthen lina on the spot where the deceased was burnt sets round it five hollow castor oil or *erand* stem s, and close by fixes five yellow-coloured flags and earthen pots. In the pots he puts milk and water and through hollow pipes lets the water drop on the ground, saying, 'Let us give the dead water to drink.' When all have poured out water they burn frankincense and offer cooked food and rice flour balls to the dead. They then bow to the offering and ask crows to come and feed on it. If the crows come and eat, the soul is believed to be happy and to have entered a new birth, If the crows refuse, their refusal to eat causes the mourners the greatest fear. The mourners call on the dead to know why he is unhappy and assure him that he has nothing to fear, and that they will take care of his family, his house, and his goods. Every means is tried to persuade the crows to eat the food. If nothing succeeds, after waiting for a long time, one of them makes a clay figure of a crow and with it touches the offering, and the party go home. The crow's refusal to eat is believed to show that the soul of the dead remains at large and becomes a ghost or demon. For thirteen days after death the family is unclean and in mourning. The chief mourner lays aside his turban and shoes, sleeps on the ground, drinks no milk and eats nothing sweet, lets his hair grow, and stays at home giving up business and never visiting the temple. On the tenth day the whole house is cowdunged and on the eleventh and twelfth the friends and relations meet at the mourner's house and the nearest relations present the son and his mother with a turbab, waistcloth, and robe, and calling a Brahman offer rice balls and ask the four bier bearers to dine. In the month of *Bhadrapad* or September on the day on which the deceased died, a feast is given to relations, friends, and castefellows.

In each village the Kunbis have a headman to whom they refer caste disputes which he settles at mass meetings of the castemen. Some send their boys to school. As a class Kunbis are poor.

<u>Malis</u>

Ma'lis, or Gardeners, are returned as numbering 52,557 and as found over the whole district. They are divided into Haldi-malis or turmeric gardeners, Jire-malis, Kadu-malis, Lingayat-malis, and Phul-malis or flower-gardeners. Of these the Kadu and Phul malis eat together but

none of the divisions intermarry. The following details apply to the Jire-malis. Their surnames are Barke. Dhevarkar, Dhole, Dhumne, Ghod, Ladkar, Lande, and Raikar. People with the same surname and quardian or devak do not intermarry. The names in common use among men are Limbaji, Rakhmaji, Satvaji, Tukaram, and Vithu; and among women, Bhagn, Chandrabhaga, Ganga, Rai, and Rakhma. They look and speak like Marathas and do not differ from them in house, food, or dress. They are hardworking, sober, thrifty, even-tempered, hospitable, and orderly. They are husbandmen, gardeners, and daylabourers, and their women help them both in tilling and in selling flowers, fruit, and vegetables. A family of five spend 16s. to £1 4s. (Rs. 8-12) month on food, and £2 to £3 (Rs. 20-30) a year on clothes. A house costs £30 to £80 (Rs. 300-800) to build, and 4s.to£l (Rs. 2-10) month to hire. Their household goods and ornaments are worth £5 to £100 (Rs. 50 -1000). The birth of a child costs 6s. to 10s. (RS. 3-5), a hair-cutting about 8s. (Rs. 4), the marriage of a boy £10 to £30 (Rs. 100 - 300), a girl's coming of age about £1 (Rs. 10), and a death £1 to £5 (Rs, 10-50). Like Marathas they keep the usual Brahmanic fasts and feasts. Their priests are Deshasth Brahmans who officiate at their houses. They make pilgrimages to Alandi, Jejuri, Pandharpur, and Tuljapur, and believe in sorcery, witchcraft, soothsaying, omens, lucky and unlucky days, and oracles. Their customs are the same as those of Marathas or Kunbis. They have a headman or patil who settles their social disputes in consultation with the castemen. They send their boys to school and are a steady class.

PAHADIS.

Pa'ha'dis or Hillmen, numbering ten, are found in the town of Poona. They are said to have come to Poona about the middle of the eighteenth century, but their origin is unknown. The names in common use among men are Babaji, Dhondi, Ganpati, Gyanu Kashiram, Kondaji, Rama, Vishnu, and Vithoba; and among women Chandrabhagabai, Gangabai, Parvatibai, Savitribai, ana Sitabai. Their surnames are Dhandoshe, Galayat, Kavane, Made Malave, Paradhi, Rasal, Rasane, Shelavante, and Vaghe. Person having the same surnames cannot intermarry. Pahadis look like Marathas and as a rule are strong and well-built. Their skin is dark, and the men shave the head except the top-knot and the face except the moustache and whiskers. They speak a corrupt Marathi both at home and abroad and live in houses one or two storeys high with walls of brick and stone and tiled roofs. Their houses are generally clean and cost £20 to £80 (Rs. 200 - 800) to build and 4s. to 8s. (Rs. 2 - 4) a year to hire. Their belongings include boxes, chairs, blankets, carpets, bedding, cushions,

and earth and metal vessels, altogether worth £10 to £50 (Rs. 100-500). They own cattle and pet animals and spend on them 4s. to 10s. (Rs. 2 - 5) a month. Their staple food is millet, rice, vegetables, and pulse. They use fish and the flesh of the goat, sheep, deer, hare pigeon, and domestic fowl. They drink liquor to excess, especially on Sundays and Tuesdays. They smoke tobacco and hemp flows or gania. Both men and women dress like Marathas and have clothes in store for holiday wear. They are hardworking hospitable, and fond of show. They have a good name for honesty. They are husbandmen, labourers, and messengers, and deal in chillies, onions, asafoetida, cumin-seed, and black pepper. A family of five spends £1 to £1 10s. (Rs. 10 - 15) a month, and their clothing casts £2 to £2 10s. (Rs. 20-25) a year. The birth of a child costs 4s.to 10s. (Rs. 2 - 5), a hair-cutting 4s. to 8s. (Rs. 2-4), a marriage £2 to £20 (Rs. 20-200), a girl's coming of age 10s. to £1 (Rs. 5-10), and a death £1 to £1 10s. (Rs. 10-15). They worship the usual Brahmanic and local goddesses, and their family deities are Bhavani of Tuljapur and Khandoba of Jejuri. Their family priests are Deshasth Brahmans who officiate at their marriages and deaths. They believe in sorcery, witchcraft, soothsaying, omens, and in lucky and unlucky days and numbers. For her first confinement a girl generally goes to her parent's house. When her time comes a midwife is called, and after delivery the child's navel cord is cut, put in an earthen jar, and buried in the room. The mother and child are bathed. During the first three days the child is fed on honey and castor oil and the mother for ten days on rice and clarified butter. From the fourth day the mother suckles the babe. On the fifth the women of the house place some moss, a piece of three-edged prickly-pear or *nivdung*, river sand, and a silver image of Satti on a stone roller or varavanta, and lay before them pomegranate flowers, turmeric powder, and vermilion. Wheat flour lamps are lighted and one is placed before them, one at each of the four corners of the woman's cot, and one in the place where the mother and babe are bathed. Fish, wheat cakes, rice, pulse, sauce, and vegetables are offered to Satti and the members of the house are feasted. The women of the house remain awake the whole night talking and singing. The ceremonial impurity lasts ten days. On the eleventh the house is washed with cowdung, the mother is bathed, and her clothes are washed. On the twelfth she worships five stones laid in a row outside of the house-door, and from one to five married women are asked to dine in the name of Satti. In the evening or at night the neighbour women meet, and cradle and name the child. The nurse receives 2s. 6d. (Rs. 1 1/4) if the child is a boy and 2a. (Re. 1) if it is a girl. Betel and boiled gram are served and the naming is over.

Between the second and twelfth month the child's hair is cut for the first time. A lucky day is chosen and the child is seated on its maternal uncle's knee and its head is shaved by the village barber; the housepeople with a band of friends go to some garden, slaughter goats in the name of Satti, and feast caste-people on the flesh of the victim. The barber is paid $1\frac{1}{2}$ d. (1 anna) for his trouble and is asked to dine. The child is dressed in new clothes and the guests take their leave. Girls are marriable between three and fifteen and boys between four and twenty-five. The boy's father goes to the girl's father with some of his friends and proposes the match. If her parents agree, on a lucky day, a band of men and women go with music from the bridegroom's and present the bride with a robe, a bodice, some wheat rice betelnuts cocoanuts and plantains, and five lemons. Her brow is marked with vermilion and she is dressed in the new suit, her lap is filled by married women with wheat rice and fruit brought from the bridegroom's, and she bows before all present. Rolls of betel leaves are handed round and the priest is paid 11/2. (1 anna). After some days the priest chooses a lucky day to hold the ceremony and preparations are made by both parents. The turmeric paste is rubbed on the bridegroom and what is left is taken to the bride by a band of married women with music. The bride is rubbed with the turmeric paste and again presented with a robe and bodice and the women return home. Next day two members of the bridegroom's family, a man and a woman are bathed. The man takes the leaves of five kinds of trees and an axe in his hand, and the woman carries some food in hers. With music and a band of male and female friends they visit Maruti's temple, lay flowers and food before the god, and return home. To the first pole or muhurt-medh of the marriage booth a bundle of hay, some turmeric, and some *jvuri* stalks are tied in a yellow cloth. To the pole are also fastened a pair of scales, and the axe tree leaves and food which have been brought back from Maruti's temple. All these are together known as the marriage devaks or guardians. In their honour goats are killed and five married women are asked to dine. In the same way marriage gods are set up at the bride's and five married women are feasted. Next day friends and relations are asked to be present at the bride's at the time of making the altar or bahule. The washerwoman sprinkles some drops of oil on the bridegroom and he is bathed; this is called the anointing or telvan. He is then dressed in fine clothes and his brow is decked with the marriage tinsel coronet or bashing. He is mounted on a horse and taken in procession with drums and pipes and a company of friends and relations and seated in the temple of Maruti. His brother goes to the bride's whose father gives him a suit of clothes to be handed to the bridegroom, who is dressed in the clothes and brought on horseback to the bride's. At the entrance

to the booth the bride's mother meets him and waves round him a cake of riceflour and a cocoanut which is cracked on the spot. He walks into the booth and is made to stand on a bamboo basket or duradi filled with wheat; and on the other side of a curtain the bride stands on a second bamboo basket filled with wheat. The priest repeats texts, the curtain is drawn aside, and the priest, and the guests throw over the bride and bridegroom handfuls of yellow rice called *mangalakshatas* or lucky rice. Cotton thread is wound seven times round the bridegroom and five times round the bride, and they are seated on the altar or bahule. The priest lights a sacred fire and the bride and bridegroom throw clarified butter and fried rice into the fire. The cotton threads that were wound round the bride and bridegroom are then twisted and each passed round piece of turmeric root. The thread that was round the bridegroom is tied to his left wrist and the thread that was round the bride is tied to her left wrist. Then the bride's father gives a copper pot and cup to the bridegroom and the girl-giving or kanyadan is over Next a ceremony called sesh is performed, the brows of the bride and bridegroom are marked with circles of vermilion in which grains of rice are stuck and copper coins are waved round them both. The bride's lap is filled with rice, wheat, and fruit, and friends and relation are feasted at the bride's. Next day her parents dress the bride in a new robe and bodice and hand her to the bridegroom's parents asking them to care for her as if she was their own child. Then the couple are led in procession to the bridegroom's, where the sister of the bridegroom waves rice and curds and a light round them, and the maternal uncle of the bridegroom takes him and the maternal uncle of the bride takes her, and each setting his charge on hip dances in a circle to the sound of music. The couple then boy before the family gods and each unties the other's marriage wrist-threads or Kankans. Next day molasses is laid before the devak or marriage gods, and again taken away. Early marriage, widow marriage, and polygamy are allowed and practised; polyandry is unknown. When a girl comes of age she sits apart for three days. On the fourth day she is bathed and her lap is filled with wheat or rice, plantains, and a cocoanut, and from that night she enjoys the company of her husband. When a Pahadi breathes his last he is bathed in water heated in a new earthen pot. The caste-people are asked to attend the funeral. The dead is dressed in a new loincloth and a turban and is laid on the bier covered with a white sheet. The chief mourner, holding in his hand a firepot hanging from string, takes the lead followed by the bearers. A little distance from the burning ground the bearers lay down the bier and change places. Some rice, a roll of betel leaves, a betelnut, and a copper coin are left on the ground, and redpowder or qulal is thrown about. On reaching the burning ground

the bier is laid down and the pile made ready. The chief mourner sits at the feet of the dead and has his head, except the top-knot, and his face shaved, paying the barber 6d. to 1s. (4-8 as.). The body is laid on the pile and the pile is lighted. Meanwhile the chief mourner dips the dead man's turban in water, and squeezes it till some drops fall into the dead mouth. When the body is nearly consumed the chief mourner sets an earthen pot on his shoulder and stands at the feet of the dead, a second man tells him to move round the pile, and with a stone pierces a hole in the bottom of the pot. Three turns are made and three holes are pierced. The chief mourner then throws the jar over his shoulder, and, as it dashes to pieces on the ground, he beats his mouth with the back of his right hand and calls aloud. All the men bathe in the river and return to the house of mourning, look at the lamp which is set on the spot where the dead breathed his last, and go home. On the third day the ashes of the dead are gathered and the place is washed with water, millet cakes are laid close by, and the mourner returns home. The ceremonial impurity lasts for ten days. On the tenth ten balls of flour are worshipped and one of them is offered to the crows and the rest are thrown into the river. As soon as a crow picks the first ball the mourners leave, bathe in he river, and go home. On the twelfth or thirteenth, at the house of mourning friends and relations are feasted on wheat cakes or meat and present the chief mourner with a turban. A memorial or shraddh feast is held on the death day at the end of a year, and also on the corresponding day during the Mahalayapaksha or All Souls' fortnight in the latter half of Bhadrapad that is September-October. The Pahadis have a caste council and settle social disputes at meetings of the castemen. They punish breaches of caste rules by fines varying from 2½ d to 10s. (1¼ as.-Rs.5); the amount is spent on drink or on a caste feast. They send their boys to school. Their fondness for drink keeps them poor.

CRAFTSMEN

Craftsmen included thirty-one classes with a strength of 81,474 or 9.62 per cent of the Hindu population. The details are:

POONA CRAFTSMEN.

| CLASS. | Males. | Females. | Total. | CLASS. | Males. | Females | Total. |
|---------|--------|----------|--------|---------|--------|---------|--------|
| Badhais | 4983 | 4673 | 9656 | Lohars | 1333 | 1254 | 2587 |
| Beldars | 368 | 338 | 706 | Lonaris | 417 | 468 | 885 |

| Bhadbhunjas | 145 | 72 | 217 | Niralis | 75 | 87 | 162 |
|-------------|------|------|--------|------------|--------|--------|--------|
| Bhavsars | 163 | 144 | 307 | Otaris | 54 | 55 | 109 |
| Buruds | 443 | 415 | 858 | Patharvats | 151 | 158 | 309 |
| Chambhars | 8766 | 8484 | 17,250 | Rauis | 188 | 189 | 377 |
| Gaundis | 173 | 174 | 347 | Salis | 1972 | 1830 | 3802 |
| Ghisadis | 251 | 247 | 444 | Sangars | 412 | 397 | 809 |
| Halvais | 41 | 26 | 67 | Shimpis | 4450 | 4429 | 8879 |
| Jingars | 351 | 299 | 650 | Sonars | 4632 | 4609 | 9241 |
| Kocharis | 28 | 37 | 65 | Sultankars | 39 | 50 | 89 |
| Kasars | 1369 | 1386 | 2755 | Tambats | 582 | 524 | 1106 |
| Kataris | 18 | 18 | 86 | Telis | 4360 | 4350 | 8710 |
| Khatris | 244 | 216 | 460 | Zarekaris | 8 | 12 | 20 |
| Koshtis | 1404 | 1309 | 2713 | | | | |
| Kumbhars | 3835 | 3904 | 7739 | Total | 41,283 | 40,191 | 81,474 |
| Lakheris | 42 | 37 | 79 | | | | |

BADHAIS

Badha'is, or Carpenters, are returned as numbering 9656 and as found chiefly in Poona. They have no subdivisions. They say that they came into the district upwards of a hundred years ago from Jalna in the Nizam's country and from Barhanpur in west Berar. They have no surnames, and are of five stocks or gotras, Jhadubanda, Mirchyavale, Purbhaya, Rajuvale, and Satnavale. Persons of the same stock cannot intermarry. The names in common use among men are Bachuji, Chayatan, Manirarn, Narayan, Nhanu, Ramkisan, Sundar, and Tarachand; and among women Bayo, Jamna, Jasiyabai, Maina, and Nandu. They are Pardeshis from Upper India and look like Pardeshis and speak Hindustani both at home and abroad. They have a slang language in which five rupees is *hatujenu* and a ¼ *anna* is *dhilor*. They live in middle class houses. Their staple food is wheat or millet pulse, and vegetables, and they eat fish and flesh when they can afford it. They are excessively fond both of country' and foreign liquor, and smoke both hemp and tobacco, but do not take opium. Their holiday dishes are cakes, sugared milk, and mutton. The men wear the threecornered Maratha turban, a waistcloth, shouldercloth, and coat, and grow the top-knot, moustache, and whiskers, all shaving the chin.

Their women wear a petticoat or *lungha* and an open-backed bodice, and roll a robe or *lugde* round the waist and draw the upper end over the right shoulder and head, tucking the one end in front. Instead of tying the hair in a, knot at the back of the head they plait it, and let it hang in a tail down the back. They do not use false hair or deck their hair with flowers. They keep clothes in store worth £2 10s. to £3 (Rs.25-30). The men wear the gold earrings called *antias* with chains worth 10s. to £2 (Rs. 5-20); and the women the earring called utarna of gold or silver worth 8s. to £1 (Rs. 4-10), the silver armlet called toda worth £1 to £L-10s. (Rs.10-15), and the gold brow-spangle called tika worth £1 is. to £2 (Rs. 12-20). They do not wear noserings because they say a woman of their caste wore a nosering when she was burnt with her husband. They are hardworking but given to drink. They are carpenters, and make boxes, and repair tables, cupboards, and stools, and also work as labourers, earning Is. to *Is. 6d.* (8-12 as.) a day. Boys of fifteen and over help their fathers in their calling and occasionally earn 3d. to 9d. (2-6 as.) a day. Their tools are, randha a plane worth Is. 6d. (12 as.), vakas an adze worth 2s. to 4s. (Rs. 1 -2), daraj a large plano worth 6d. to Is. (4-8 as.), gunya a square worth 6d. to 2s. 6d. (Rs. ¼-1¼), khatdvnis measurer worth 3d.to 6d. (2-4 as-); pilpil a grooving plane worth 9d to Is. 6d. (6-12 as.), patasi a large chisel worth 1s. '3d. to ls.6d.(10-12, as.), chaurshi a gimlet worth 3d. to Is. (2-8 as.), samta, an auger worth $4\frac{1}{2}d$. to $7\frac{1}{2}d$. (3-5 as.), sandas or pincers worth $4\frac{1}{2}$. to $9\frac{1}{2}d$. (8-6 as.), hatodi or hammer worth 6d. to Is. (4-8 as.), and a pair of karvats or saws worth Is. to 8s. (Rs. $1\frac{1}{2}$ - $1\frac{1}{2}$). A house costs £10 to £25 (Rs.100-250) to build and Is. to 4s. (Rs. 1/2-1) a month to rent, and their vessels and other furniture are worth £1 to £2 (Rs. 10-20). A family of five spends £1 4s. to £2 (Rs. 12-20) a month on food, and £1 10s. to £2 10s. (Rs. 15-25) a year on clothes. A birth costs about £2 (Rs. 20), the marriage of a boy £10 to £15 (Rs. 100 -150), and of a girl £5 to £6 (Rs. 50-60). A girl's coming of age costs about 6s. (Rs. 3) and a death about £6 (Rs. 60). Their chief god is Mahadev, but they worship the usual Hindu gods and goddesses, and keep images in their houses. Their priests are Pardeshi Brahmans and they make pilgrimages to Tuljapur in the Nizam's country and to Saptashringi in Nasik. Their fast days are the ekadashis or lunar elevenths of every month and the Mondays of Shravan or July-August, Ram-navami in March-April, and Gokulashtami in July-August. Their feast days are Sankrant in December-January, Shimga in February-March, Dasara in September-October, and Divali in October-November. During the first five days after childbirth, a castor oil lamp is kept burning in the lying-in room, and the child is laid in a winnowing fan, and, in presence of a few castepeople, is named by the priest who is paid 2s. to 2s. 6d. (Rs. 1-11/4).

Near relations or friends wave a copper coin over the child's head and give it to the priest, who in this way sometimes makes 3d. to 1s. (2-8) as.). The quests are treated to balls of wheat flour and sugar, and large quantities of liquor are drunk. On the sixth day they worship six small brass plates or taks with an image of the goddess Satvai. They hang one round the neck of the child, a second round the mother's neck, and the other four round the necks of four married women. Women are feasted on the sixth and again on the seventh. On the twelfth they go some distance from the house to a garden or grave and worship seven pebbles offering them flowers and feasting on sugared milk or cakes. They clip a child's hair, whether it is a boy or a girl, when it is three months old, and offer a goat in the name of Ransatvai or the Forest-Sixth, and spend £1 to £2 (Rs. 10 - 20) on the feast. They marry their boys between fifteen and twenty and their girls between seven and boys twelve. A day before the marriage the boy and girl are rubbed with turmeric at their own houses and marriage booths are built. Their devak or marriage guardian is the goddess Chatarshingi or Nagarkoti, whose image they keep in their houses, and whom they worship, offering goats and feasting near relations. On the marriage day, pieces of turmeric root are tied with a yellow thread to the right and left wrists of the boy and girl, and, at the girl's house, in addition, a mango-leaf garland is hung on the door of the marriage hall. The boy is either seated on horseback or carried on foot to the girl's house accompanied by male and female relations and friends. Before dismounting the boy touches the mango wreath either with a sword or a rod and is given a turban and scarf. The boy then dismounts, walks into the marriage hall, and is seated on a low wooden stool. The girl is brought and seated on another stool close to the boy and in the same line with him. The sacrificial fire or hom is lit and fed with parched grain and butter. The boy and the girl stand on the stools and a cloth is held between the fire and the couple and yellow rice grains are thrown over their heads while the priest repeats verses. At the end of the verses the cloth is pulled on one side and the boy and girl are husband and wife. Then the boy and girl go round the fire seven times. When the sixth turn is completed the priest asks the parents and relations of the boy and girl if he can allow them to take the seventh turn, and the friends say. You may allow them; and the couple take the turn and sit on the stools as before. The hems of their clothes are tied together and they bow before the household gods. The boy begs the girl's mother to untie the knot and after she has looseaed it he presents her with 1s. 3d. (10 as.). A feast is then given in the house of the bride. After the feast is over the boy and girl, with music and followed by relations and friends, ride in procession to the boy's house. When they enter tile house a queensmetal plate is set before

them filled with water and in it 10s. (Rs. 5) and a ring are dropped five times, and the bride and bridegroom try to pick them out, and whoever picks them out owns them. This contest is called juva or gambling. The day ends with a feast. When a girl comes Of age she sits by herself for four days and on the fifth is presented with a robe and bodice, and her lap is filled with rice, cocoanut, plantains, and a bodicecloth. The ceremony ends with a feast both to the girl's and the boy's relations. They burn their dead and mourn four days, when they shave the chief mourner's bead and moustache. The mourner's fatherin-law or other near relation or his castemen present him with a new turban. A dinner of mutton and liquor is served and the castemen are presented with 4s. (Rs. 2) to be spent on liquor. On the fifth day they hold a remembrance or shraddh ceremony near the burning ground under the shade of some trees. Twenty-one rice balls are offered, and the chief mourner taking the balls and the deceased's bones, jumps twenty-one times into water and throws them into the river. A feast is held and the mourners return home. On the sixth day the four corpsebearers and if the mourner can afford it relations and friends are feasted. Badhais are bound together as a body and settle social disputes at meetings of the castemen. They send their boys to Marathi schools for a short time. Their drunken habits are bringing them to poverty.

BELDARS.

Belda'rs, or Quarrymen, are returned as numbering 706 and as found all over the district. They say they take their name from the sacred bel tree, AEgle marmelos, but the probable origin of the name is the Persian bel a piekaxe. They are divided into Pardeshi Beldars and Marathi Beldars who do not eat together or intermarry, in appearance, speech, dress, and customs, Marathi Beldars do not differ from Marathi Kunbis. The names in common use among the Pardeshni Beldars are for men, Bhavansing, Chimansing, Jairamsing, and Kisansing; and for women, Ganga, Jasoda, Mohan, Paru, Munya Rama, and Uma. Their surnames are Bolde, Gondhli, Kadili; Navale, and Pando; people bearing the same surname eat together but cannot intermarry. They are tall, dark, dirty, sturdy, strong hot-tempered, and hardworking. The men wear the top-knot and whiskers, but not the beard. They speak incorrect. Hindustani, and live in dirty untidy thatched huts or poor houses. Their house goods include earthen vessels, blankets, and quilts or vakals together worth about £2 (Rs. 20). They eat fish and the flesh of the goat and sheep and drink liquor, and their staple food is millet bread, spilt pulse, and vegetables. Their feast dishes are purawpolis or sweet cakes and shirapuris that is cakes of wheat-flour

butter and molasses the cost of a feast is about 4½d. (3 as.) a guest. A family of five spends £1 10s. to £2 (Rs. 15-20) a month on food and about £2 (Rs.20)a year on clothes. The men wear a pair of short light drawers or chaddin reaching to the knee, a jacket, a shouldercloth, and a turban folded in Maratha fashion. The women wear a petticoat or lungha, and an open-backed bodieo, and draw a piece of cloth over the head. The men mark their brows with sandal and the women with redpowder the women do not wear false hair or deck their heads with flowers. They do not wear hair or nose ornaments but the earrings called balya, the necklaces called haslis and pots, the silver wristlets called dandohas, and the silver toe-rings called chutkyas, the whole averaging £3 to £5 (Rs.30-50) in value. They are properly quaerymen but oome contract to square stones for builders; others are bricklayers and make clay walls; others labour or let donkies on hire at 2s. (Re. 1) a day for eight to twelve donkies. To build a house costs about £30 (Rs.800) and to rent a house about 4s. (Rs.2) a month. A birth costs 10s. (Rs. 5), a boy's marriage £5 to £8 (Rs. 50-80), a girl's marriage £4 to £6 (Rs. 40 - 60), and a death £2 (Rs. 20). They have house images of Mahadev, Krishna, Ganpati, and Ram. Their priests are ordinary Deshasth Brahmans, and they keep the usual Brahmanic fasts and feasts such as Mahashivratra in February, Holi in March, Gudipadva in April, Ashadhi Ekadashi in July, Nag-panchmi, Rakhdipaurnima, Gokul-ashtami, and all the Mondays of Shravan in August, Ganeshh-chaturthi and Anant-chaturdashi in September, Vasara in October, and Divali and Kartiki Ekadashi in November, When a child is born the midwife, who is generally a Maratha, sprinkles cold water over it, cuts its navel cord, and buries the cord either in the lying-in room, or outside of the house. The child and the mother are washed in hot water and laid on a blanket on the ground. On the fifth evening the mother worships the goddess Satvai and offers her millet and wheat bread, and an elder kills a goat in front of the woman. A dinner is given in the evening to near relations and friends and a little mutten and a piece of bread are sent to the houses of neighbours, relations, and friends, who, in return, give 3%d. (1/4 anna). This ends the ceremony. After childbirth a woman remains unclean for a month and a quarter. The Beldars name the child if it is a girl on the ninth and if it is a boy on the twelfth day after birth. The details are the same as those observed by Marathas. When a child, whether it is a boy or a girl, is between three months and three years old they cut its hair for the first time, and, laying the hair on a millet cake, offer it to the goddess Satvai along with cooked rice, vegetables, and bread. A goat is killed and its head is placed before the goddess. The barber is given uncooked food and 7½ d. (5 as.) in cash and the relations after feasting on cakes and mutton return to their homes. They marry their

boys between nine and twenty-five and their girls before they come of age. The offer of marriage comes from the boy's house. When the marriage is settled, the boy's mother, with male and female relations and friends, goes to the girl's, marks her brow with red-powder, and presents her with 10s. (Rs. 5). Another 10s. (Rs. 5) are given to the caste, who buy sweetmeats, and distribute them among the castepeople. They rub the boy and the girl with turmeric at their homes three to five days before the marriage. They also tie a turmeric root and a betelnut in a piece of cloth and fasten it to the boy's and girl's wrists a couple of days before the marriage. A bamboo post is fixed in the ground in front of the house and covered with mango leaves and a square mound of earth is raised round it. On the mound is set an earthen jar whitewashed and marked with red green and yellow lines. A betelnut and a piece of turmeric root are put is the jar which is called the devak or quardian, and is worshipped by the boy and has a goat killed in front of it. The flesh of the goat is eaten by the guests. The same ceremony is performed at the girl's house. On the marriage day the boy is dressed in new clothes, a waistcloth, coat, turban, and shouldercloth, and with music kinspeople, and friends is taken on horseback to the girl's. On the way the guests every now and then throw grains of red rice over the boy's head. When they reach the village temple of Maruti they break a cocoanut, and lay it before the god with a packet of betelnut and leaves. When the procession reaches the girl's house the girl's sister approaches the boy with two metal water-pots; she is given 3d. to 6d. (2-4 as.), and waves the waterpots round his head and throws the water away. When the boy walks into the marriage booth his father hands the Brahman priest the lucky wedding necklace or mangalsutra and he fastens it round the girl's neck. The boy is seated on a new sheet and on his right is the girl who is dressed in a white robe and bodice, the ends of both of which are dyed yellow. The girle covered with cloth and her parents who have fasted since the moraning wash the boy's and girl's feet with cold water and drink the water. The priest kindles the sacrificial fire or horn in front of the guardian jar or devak and ties together the hems of the boy's and girl's garments. While the Brahman repeats texts the girl followed by the boy walks thrice round the guardian jar and the sacrificial fire; and then the boy followed by the girl walks four times round them. As sop as the seventh turn is completed the priest ceases to repeat texts and the boy and girl are husband and wife. They are taken before the house gods, and, after bowing to them, the girl's mother unties their robes, a dinner is given, and the guests retire. Next evening the boy's party is feasted, and the boy and his parents are presented with turbans and a robe and bodice. Then the boy's parents, presenting the girl with new clothes and dressing her in them,

take he in procession along with the boy to their house. Before entering the house the boy has to promise his sister to give his daughter in marriage to her son. After bowing before the house gods, the boy untial the girl's turmeric bracelet and the girl unties the boy's, and a feast to the girl's party ends the marriage. When a Pardeshi Beldar dies the body is bathed in cold water, covered in a sheet from head to foot, laid on a bier, and carried to the burial ground, the chift mourner walking in front with a jar containing burning cowdung cakes. When they reach the burial ground the fire is thrown on the side, the body is laid on its back in the grave, and the grave is filled. The mourners bathe and go to the deceased's house, and after peeping, at the lamp which is kept burning on the spot where the deceased breathed his last and eating a leaf of the nimb tree, they return to their homes. The family of mourners hold themselves impure for ten days; they offer no rice balls to the crows, do not shave their moustaches, and perform no mind-feast at the end of the year. A mutton feast on the twelfth day and the present of a turban to the chief mourner by a near relation ends the death ceremony. Pardeshi Beldars are bound together as a body and their social disputes are settled at meetings of the castemen. They do not fiend their boys to school or take to new callings. They say that their calling is not so good as it was, because limestone and sand are carried in carts instead of on donkey-back.

BHADBHUNJA'S.

Bhadbhunja's, or Grain-parchers, are returned as numbering 217 and as found over the whole district, except in Junnar, Khed, Sirur, and Purandhar. They are divided into Pardeshis and Marathas. The Maratha Bhadbhunjas do not differ from Maratha husbandmen in appearance, customs, or way of living. The Pardeshi Bhadbhunjas are said to have come to the district about fifty years ago from Cawnpur, Lucknow, Mathura, and Bareily in Upper India. The surname of all of them is Kanojya and the family-stock Kashyap. They eat together and intermarry. The names in common use among men are Binda, Bejnath, Lakshman, Lals, Motiram, and Parag; and among women Batata, Bhaga, Janki, Lakshmi, Punya, and Radha. They are tall dark and strong. The men wear the top-knot, moustache, and whiskers. Their home speech is Hindustani. They do not own houses but pay monthly rents of 4s. to 8s. (Rs. 2-4). They use the front part of their houses as shops and keep cows and sheep and servants whom they pay 4s. to 8s. (Rs. 2-4) a month with food. Their staple food is wheat and millet bread, pulse, and vegetables except onions. They also eat fish and the flesh of sheep, goats, hare, and deer, but not poultry.

They drink country and foreign liquor and offer goats to the small-pox goddess when they recover from an attack of small-pox. Their holiday dishes are sweet milk, pulse cakes or vades, wheat cakes or puris, and rice. The men wear a short waistcloth or pancha, a shouldercloth or pichhodi, and a Maratha turban or headscarf. The women wear a petticoat over which they fold a robe or waistcloth, and pass one end over the head and bodice. The ornaments worn by men are gold earings or kudkis worth £1 10s. to £3 (Rs. 15-30), silver waistbands or kargotas worth £1 10s. to £3 (Rs. 15-30), and a gold coin or mohar necklace worth £2 to £2 10s. (Rs. 20-25). The women wear in the ears gold or silver balis worth 2s. to £1 16s. (Rs.1-18) and silver phuls worth 4s. to 8s. (Rs. 2-4), a nosering or *nath* of gold and pearls worth 16s. to £2 (Rs. 8-20), and gold necklaces called panpots and vairatiks, the panpot worth £1 16s. to £12 10s. (Rs. 18-35) and the vajratik worth £1 to £2 (Rs.10-20), and a silver necklace or sari worth 8s. to £1 12s. (Rs. 4-16); of bracelets they wear silver tadiyas worth 16s. to £1 10s. (Rs. 8-15), gots worth 16s. (Rs. 6-8), pahuchis worth, 10s. to £1 4s. (Rs.8-12), chhands worth 10s. to 16s. (Rs. 5-8), and mukare kangans worth 16s to £1 (Rs. 8 -10); on the feet they wear kades and todes worth £2 to £2 10s. (Rs. 20 - 25) and bichhvas worth 16s. to £1 4s. (8-12). They are proverbially dirty but hardworking. They are parchers and sellers of parched grain and pulse. They buy the grain and pulse from Maratha or Vani grain-dealers and after parching it sell it at a profit of twelve to twenty per cent. Their women and their children from the age of ten or twelve help them in their calling, sitting in the shops and soaking and drying grain. In spite of their help a Bhadbhunja family does not earn more than £1 to £1 10s. (Rs. 10-15) a month. Their appliances are an iron pan or kadhai for parching the grain worth 4s. to 10s. (Rs. 2-5), a chalan or sieve of iron worth Is. to Is. 6d. (8-12 as.), a daran or scythe-like bar to stir up the grain worth 9d. to 1s. (6-8 as.) a kalachha or iron bar and hook to remove ashes worth about 1½ d. (7 as.), a stone mortar or ukhali worth 6d. to 9d. (4-6 as.), a wooden pestle or *musal* worth 1s. to 1s. 6d. (8-12 as.), a COPPER water-pot or handa for boiling the grain worth 10s. to £1 (Rs. 5-10), a tab or *tip* worth 1s. 9d. to 2s. (Re. 7/8-1), and a bag or *pola* for holding grain worth about $7\frac{1}{2}$ d. (5 as.). A family of five spend 14s. to £1 (Rs. 7-10) a month on food and £3 to £4 (Rs.30-40) a year on clothes. Their house goods are not worth more than £2 10s. (Rs. 25). A birth costs 10s. to £2 (Rs. 5-20), a marriage £10 to£35 (Rs.100-350), and a death £2 to £2 10s.(Rs.20-25). They are Smarts and have house images of Bahiroba, Bhavani, Khandoba, and Mahadev. Their priests are Pardeshi Brahmans. They make pilgrimages to Alandi, Kondanpur, Pandharpur and Tuljapur, and fast on Shivaratra in February, Ashadhi Ekadashi in July, Gokul-ashtami in August, Anantchaturdashi in September, Kartiki Ekadashi in November, on all Pradoshs that is the dark thirteenths of each month, and all Mondays. Their feasts are *Shimga* in March, *Nag-panchami* in August, *Dasara* in October, and Divali in November. Bhadbhunjas consider their women impure for twelve days after a birth. The child's navel cord is put in a small earthen jar, covered with another jar, and buried somewhere in the house. The child is named on the evening of the twelfth, the name being given by the priest. The child's hair is clipped on a lucky day when it is between one and seven years old they marry their girls' at any age but generally between twelve and sixteen, and their boys up to thirty. The girl's father goes to the boy's house and asks if he will take his daughter as a wife for his son. If the boy's father agrees a few castemen are called and a rupee or two are presented to the boy along with a packet of sugar. A day before the marriage a marriage hall is built with a post in the centre and the bride and bridegroom are rubbed with turmeric and oil at their houses by an unmarried girl. At the girl's house near the post in the marriage booth a stove is placed and over the stove an earthen jar, in which the girl's father throws grains of red rice while the priest repeats verses in the name of Aqui, Indra, Narayan, Surya, and Vishnu. Another earthen jar is placed near with mai and gulgule, preparations of wheat-flour and molasses, which, at the end of the marriage, are served to the guests On the marriage day a marriage ornament or *maur* of palmyrs palm leaves is tied to the boy's brow and he is taken to the girl's house on horseback accompanied by relations, friends, castefellows, and music. Some, instead of taking the boy to the girl's house bring the girl to the boy's house in a palanguin. In either case, before entering the marriage hall, bread and water are waved round the boy's or girl's head. In the hall the boy and girl are bathed separately and dressed in new clothes. A blacksmith is called and with cotton thread ties on the right and left wrists of the boy and girl around piece of iron called kankan about the size of a shilling and retires with is. to 2s. 6d. (Rs. $\frac{1}{2}$ -1 $\frac{1}{4}$). The boy and girl are then made to stand on two low wooden stools face to face, a cloth is held between them, the Brahman priest repeats verses, and at the end throws grains of rice over their heads, and they are husband and wife. They are next seated on the stools in a line with joined hands. The girl's father comes and washes the boy's feet, worships him, and pours water over the girl's and boy's hands, and presents the boy with 4s. to 10s. (Rs. 2-5). This ends the girl-giving or kanyadan. Wheat flour, turmeric, and redpowder drawings are traced on the ground, and over the drawings is placed an earthen pot filled with cold water and mango leaves and covered with an earthen plate. Over the plate is set a lighted earthen lamp and near the lamp the sacrificial fire is kindled. The hems of the boy's and girl's clothes are

tied together and they walk seven times round the fire. A feast is given and after the feast is over the boy rides with his wife on horseback to his house and the marriage ceremony is ended. The palm marriage coronet or maur is either thrown into a river or stream or is kept in the house for luck until some other ceremony takes place when it is thrown into some stream or pool. Bhadbhunjas burn their dead except victims of small-pox who are buried. When a person dies they pour hot water over the body and cover it if it is a man in a white tapta, if a widow in white cotton cloth, and if a married woman in a green robe and bodice. They strew flowers and ketel leaves over the body and bow to it in each of the corpse's hands they place a wheat ball the ball in the right hand having a copper coin in it. Half-way to the burning ground the bier is lowered, the ball containing the coin is laid on the ground, and each mourner sets five pebbles over it. The corpsebearers change places, those in front going behind and those behind going in front. When they reach the burning ground the bier is placed near water in such a way that one end of the bier is in the water. The chief mourner dashes the fire-pot on the ground and has his head and face shaved by a barber. By this time the pile is half raised and the bearers lay the body on it. The chief mourner dips one end of his shouldercloth in the river and squeezes it into the dead mouth. After lighting the pile the chief mourner walks thrice round it with an earthen water-jar, and dashing the jar on the ground beats his mouth. When the skull has burst the chief mourner throws a little butter and a cowdung cake over the pyre and the rest follow him throwing on small pieces of cowdung cakes. All bathe and go home. On the third day the ashes are thrown into water, and-the spot where the body was burnt is sprinkled with cow's urine and some parched grain or sweetmeats are left for the deceased to eat and depart in peace. They mourn the dead if a woman for nine days and if a man for ten days. At the end of the mourning the heads of the chief mourner and other near relations are shaved. On the thirteenth day they give a feast, and near relations or castemen subscribe to give the chief mourner a turban. They have a headman or chaudhari with whose consent the castemen settle dispute. They send their boys to school. Competition among the different classes of grain-parchers is said to be reducing their earnings.

BHAVSARS.

Bha'vsa'rs, or Dyers, are returned as numbering 307 and as found over the whole district. They say they came about seventy or eighty years ago from Mungi-Paithan about fifty miles north-east of Ahmadnagar. They have no subdivisions. Their surnames are Banchhod, Lale, Lokhande, Modgare, and Parpate; people bearing the

same surname do not intermarry. The names in common use among men are, Bhau, Rama, Sahkharam, Thamaji, and Vithoba; and among women, Jita, Lhani, Rama, lambai, and Thaku. They are short, stout, and regular-featured. The men wear the top-knot and moustache, shaving the cheeks and chin. They speak Marathi They live in middleclass houses with walls of mud and bricks and tiled roofs. A Bhavsar's house can be easily known from the straining bag or zoli and the turbans hung in the veranda to dry. Their daily food is Indian millet bread, split pulse, and vegetables. They eat rice about once a week, and fish and the flesh of goats and sheep when they can afford it. They do not object to eat hare and deer, but they do not eat poultry, pigeons, partridges, or geese. They drink both country and foreign liquor, smoke tobacco and hemp, and drink hemp. A. family of five spend £1 to £1 10s. (Rs. 10-15) a month on food and 6s. to 10s. (Rs. 3-5) on liquor. Their feasts of cakes cost £2 to £2 10s. (Rs. 20-25) for a hundred guests including women and children, £2 14s. to £3 10s. (Rs. 27-35) for a feast of gram or bundi balls, and £1 4s. to £1 10s. (Rs.12-15) for a feast of wheat bread and split pulse. The men dress either like Marathas or Deccan Brahmans in the waistcloth, coat, waist-coat, shouldercloth, turban, and shoes. The women wear the backed-bodice and the robe hanging like a petticoat without drawing the skirt back between the feet. Their ornaments the same as those worn by Deccan Brahman women except that the older women wear a pearl or *moti* in the nose instead of the *nath* or nosering. A family of five spends £2 10s. to £310s. (Rs.25-35) year on clothes. They are hardworking, sober, thrifty, and orderly. They prepare colours and print and dye cloth charging 2s. to 8s. (Rs. 1-4) for dyeing a turban red or abashdi, orange or narangi, and scarlet or pomegranate gulhenar, and 6d. to 1s. (4-8 as.) for dyeing it motiva or blush. About one-fourth of the charge is profit they buy dyes from Gujarat Vanis at £3 to £4 (Rs.30-40) the pala of 240 pounds (120 shers). Papadkhar or impure carbonate of soda costs them 2s. (Rs. 1) for eight pounds; and lemons 3d to 6d. (2-4 as.) the hundred. Their appliances are earthen pots or kundis, two metal pots called satals or tapelas and a cloth bag or *jholi* hung on a four-legged wooden frame through which they strain their colours. They are in easy circumstances. They consider themselves Shudras and do not know whether they are Shaive or Vaishnavs. They have house images of the usual Deccan gods out their chief objects of worship are Balaji or Krishna and Hinglajmata. They keep the usual fasts and feasts and believe in the power of spirits and ghosts. Their priest is a Deshasth Brahman whom they greatly respect. On the evening of the fifth day after the birth of a child in the mother's room a grindstone or pata is laid near the mother's cot, and on the stone a picture of the goddess Satvai or Mother Sixth is traced with

grains of rice, and a small silver or gold metal plate called tak with an image of Satvai impressed on it is set close by. A goat is killed in front of the plate and its head is laid beside the tracing of Satvai on the grindstone, and all are worshipped. A feast is held but no liquor is drunk. The house women watch the whole night so that the goddess may not take the child away. Then till the eleventh day no ceremony is performed but the mother is considered unclean and is not touched. On the eleventh day the house is cowdunged, and the mother, child, cot, and clothes are washed and the uncleanliness ceases. On the twelfth day either five or seven pebbles are set in a line in the house or on the roadside in front of the house and worshipped by the mother, who offers rice, curds, and wheat bread. Girls are named on the twelfth and boys on the thirteenth day after birth, the name being given by the women in the house. The expense during the thirteen days after a birth varies from £1 4s. to £4 10s. (Rs.12-45). They shave a boy's head when he is one to three months old, and girls who have a brother not more than three years old have their hair shaved along with the boy. If a girl is not born until after the brother next to her has been shaved only a few of her hairs are cut with scissors on her wedding day. On the hair-cutting day the child is seated on its father's or mother's knee, and the barber sits in front and shaves the head and is paid 2s. 6d. (Rs. 1¼). The hair-cutting ends with a dinner to near relations, the expenses varying from 6s. to £1 (Rs.3-10). Girls are married from the time they are in the cradle till they are ten or twelve, and boys from ten to twenty or twenty-five. The boy's father looks out for a wife for his son. When he has found a suitable match he takes with him a couple of near relations or friends and formally asks the girl's father if he will give his daughter in marriage to his boy. If the girl's father agrees the boy's father asks his family priest to name a lucky day, and on that day he goes to the girl's taking a few near relations and friends and his family priest. After they are seated the girl is called and takes her seat near the priest. The priest marks her brow with redpowder, presses her brow with a silver coin generally a rupee, and gives the coin into her hands. Sweetmeats worth 4s. to 8«. (Rs. 2-4) and betel packets are served and the guests retire. This is called the redpowder rubbing or kunku-lavne; it costs the boy's father 10s. to 14s. (Rs. 5-7). Their asking or magni is the same as the Kunbi asking and the turmeric-rubbing lasts five to seven days. The boy and girl are rubbed with turmeric at their homes. On the first day five married women grind turmeric and rub it on the boy's body, and, taking some to the girl's house with a new green robe and bodice, accompanied by kinswomen and music, rub the girl with it, dress her in the new clothes, and return with a present of a turban and sash for the boy. The turmeric rubbing is repeated both at the boy's and girl's

during each of the next five or six days, and during those days no other ceremony is performed. Marriage booths are built at both the houses and an earthen altar is set up at the girl's with five earthen jars ranged round it. Their marriage guardian or *devak* is the leaves of four figs, Fiona religiose, F. glomerata, F. indica, and F. infeotora, and of the mango. In the evening of the marriage day, accompanied by kinspeople and friends, the boy goes on horseback to Maruti's temple in the girl's village and takes his seat on the veranda. The girl's party come to the temple, present the boy with a turban and sash, put new shoes on his feet, and bring him to the girl's. Before the boy enters the marriage hall an elderly woman waves rice and curds round his head and throws them on one side. The girl's father leads him into the marriage hall and makes him stand en a wooden stool, blanket, or carpet, in front of the girl, and a cloth is held between them. The priest repeats verses and at the end throws grains of rice over their heads, and the boy and girl are husband and wife. Their right wrists are tied with seven rounds of yellow cotton or kankan thread to which a piece of turmeric root is fastened. The sacred fire is lit on the altar by both the boy and girl, and fed with butter and parched rice. The boy's father presents the girl's brother with a turban. He ties together the skirt of the boy's and girl's robes and they are led to the village Maruti's temple, bow to him, and return. The day ends with a dinner. Next evening exchange presents of clothes are made between the two houses and the boy takes his wife in a procession accompanied by kinspeople, friends, and music, to his father's house. A marriage costs the boy's father £15 to £35 (Rs. 150-350), and the girl's father £5 to £10 (Rs. 50-100) When a girl comes of age she is seated by herself for four days. On the morning of the fifth she is bathed, presented with a new robe and bodice, and her lap is filled with betelnut and leaves, plantains, almonds, and rice or wheat. The girl's mother presents the boy with a turban and sash and the girl' with a robe and bodice. The observance ends with a dinner to near relations and friends. A girl's coming of age costs her husband's father £1 to £3 (Rs. 10-30) and her own father 16s. to £1 12s. (Rs. 8-16). They have no ceremony during a woman's first pregnancy. They try to keep her pleased and feed her on a variety of dishes. When a person dies, relations, friends, and castefellows are told, the body is brought out of the house and laid on the house steps, and warm water is poured over it. A piece of cloth is rolled round its loins; it is laid on a bier, and sweet flowers are strewn over the body. The bier is carried on the shoulders of four men, and the chief mourner walks in front carrying sin earthen pot with burning cowdung cakes. On the way to the burning ground, the body is rested and pieces of bread are left for the evil spirits to eat. At the burning ground a pile is raised, the body is laid on the pile, and the pile is

kindled by the chief mourner. When the pile is completely burnt the chief mourner walks thrice round it with an earthen jar full of water. At the end of the third turn ho dashes the jar on the ground and cries aloud beating his mouth with the back of his right hand. The mourners return home. On the third day the chief mourner goes to the burning ground, removes the ashes, shaves his moustache, bathes, and sprinkles cow's urine and dung on the ashes. On the spot where the body was burned he sets three earthen jara filled with cooked rice curds honey and milk, and after bathing returns home. They mourn ten days and on the eleventh the chief mourner goes to the river side, prepares ten wheatflour bails, offers one to the crows, and throws the rest into water. On the eleventh or twelfth day the memorial or shraddh ceremony is perforated at the mourner's house, and either on the twelfth or thirteenth day the caste is feasted chiefly on sweet, cakes or puran-polis. The whole ceremony costs £1 to £4 (Rs. 10-40). They have a caste council and settle their social disputes at meetings of the castemen. The punishments vary from making a bow to the caste to giving them a feast. They send their boys to school, but do not keep them at school for any length of time. As a class they are fairly off.

BURUDS.

Buruds, or Bamboo workers, are returned as numbering 858 and as found all over the district, they say they came into the district upwards of two hundred years ago from Aurangabad, Nagar, and Satara. Their story is that they are Marathas who were put out of caste because they made a bamboo basket for Parvati's flowers and fruit when she was going to worship the *nad* tree on *the* June or *jyeshth* full-moon. They are divided into Jats, Kanadis, Lingayats, Maratha, Parvaris, and Tailanga, who do not eat together or intermarry. The following particulars apply to the Maratha Buruds. Their surnames are Bhovare, Chinchavle, Ghorpade, Jagtap, Kene, Mohite, More, Povar, Sanawle, Shelke, Shinde, and Vartab. People bearing the same surname do not intermarry. The names in common use among men are, Bhanji, Bahiru, Govind, Ithu, Maruti, and Pandu; and among women Chandrabhaga, Ganga, Girja, Krishna, Rai, and Rama. They look like Marathas and speak Marathi. They live in poor houses and have metal and earthen vessels. They own castle and sheep, goats, and fowls. They eat fish and mutton and drink liquor. Their staple food is rice, millet, and vegetables, and their feasts are of puranpolis or sweet cakes, and shirapuris wheat-flour and sugar cooked in butter and bread. The men dress like Marathas wearing the waistcloth, coat, waistcoat, shouldercloth, and Maratha turban; and the women in a

backed bodice and the full. Maratha robe the end of which they draw back between the feet and tuck into the waist behind. They wear the same ornaments as Marathas. They are hardworking and orderly, bat fond of drink. They live by making bamboo baskets, mats, fans, and sun-screens, the women doing as much work as the men They sell their mats at 6s, (Rs. 3) the hundred square feet, their baskets at \(^3\)4d, to 6d. ($\frac{1}{2}$ -4 as.), and their sieves or chaluyas at $\frac{3}{4}d$. to $\frac{1}{2}d$. ($\frac{1}{2}$ -1 a,). They also make cane chairs which they sell at 6d, to 1s. (4-8 as.). Their average earnings are 10s. to 14s. (Rs. 5-7) and most families have at least two or three wage-earning members. Their chief god is Mahadev but they worship Bhavani, Bahiroba, Khandoba, Krishna, Maruti, and Ram. They keep the usual Hindu fasts and feasts and show equal respect to Brahmana and Jangams and call both to their houses at marriages and deaths. They go on pilgrimage to Alaudi, Pandarpur, tuliapur and Kanoba in Ahmadnagar, On the fifth day after the birth of a child a silver image of the goddess Satvai is made, laid on a grindstone, and rubbed with redlead. Near it pieces of moss or sheval and prickly-pear or *nivdung* are laid, and worshipped by the house people. The goddess is offered bread and split pulse, and four plates filled with split pulse and bread are set one on each side of the grindstone and worshipped. A dough lamp is kept burning, and the women sing and talk the whole night. They hold a woman unclean for twelve days after childbirth. At the end of the twelve days the house is washed with cowdung, the clothes are cleaned, and the mother and child are bathed. Five pebbles are worshipped outside of the house, and in the evening the child is laid in a cradle and named, the name being given by the oldest person in the house. Sometimes when the child is between three months and two years old its hair is clipped either at home or at a distance from the village, a goat is killed, and a feast is given. They marry their girls before they come of age and their boys up to twenty-five. The proposal comes from the boy's side. His father goes to the girl's father and asks his daughter in marriage. Their betrothals are the same as Maratha betrothals. Their marriage guardian or devak is a mango twig which is brought and consecrated in the same way as the Maratha marriage guardian. During the marriages ceremony the boy and girl stand on four bamboo baskets, each resting a foot on a basket, and a cloth is drawn between them. The Jangam is present and the Brahman repeats marriage verses and throws grains of rice over their heads and when the verses are ended the boy and girl are husband and wife. The Brahman kindles the sacrificial fire and the boy followed by the girl passes five times round it. Then the hems of their garments are tied into a knod and they bow to the house gods. The boy carries off an image from the god-house, and the girl's father persuades him to give it up exchange for a

cocoanut. The day ends with a dinner. Next day a feast is held and the villagers and the boy's relations are feasted. In the evening the boy walks with his bride to his village accompanied by kinspeople and music, and the festivities end by a feast at the boy's to the girl's parents kinspeople and friends and to his own villagers. When she comes of age a girl is seated by herself for ten days, when her lap is filled with fruit and rice or wheat. In the seventh month of a first pregnancy a dinner is given and five married women are feasted one each day. They either bury or burn the dead with the same observances as Maratha On the third day after burial the bearers are feasted and cooked rice is sprinkled over the spot where the deceased was buried or burnt On the tenth day rice balls are offered to the spirit of the deat, and on the thirteenth the Brahman priest is given uncooked food and money and the caste are dined. They allow widow marriage and polygamy, but not polyandry. They have no headman, and settle social disputes at meetings of the castemen. They live in. fair comfort but are poor. They say their craft is falling as baskets are now made of iron instead of bamboo. They do not send their boys to school and do not take to new pursuits.

CHAMBHARS

Cha'mbha'rs, or Tanners, are returned as numbering 17,250 and as found over the whole district There are five classes of Chambhars Dakshanis, Konkanis, Katais, Bengalis, and Mang Mochis, who neither eat together nor intermarry. The following particulars apply to Dakshani or Deshi Chambhars. They say their ancestors came into the district daring the supremacy of the Peshwas. Their surnames are Bhoele, Kale, pote, Satpute, Shinde, and Sonavne, and persons bearing the same surname cannot intermarry. The names in common use among men are Bhagu, Dagdu, Gohivya, Gyanu, Kara, and Yamaji; and among women Ganga, Itha, Koyna, Rakhma, Vanarsi, and Yena. They are dark, and, except that they are dirtier and less well fed, resemble cultivating Marathas both in appearance and speech. They live in one-storied houses with mud walls and tiled roofs. They keep sheep, goats, and fowls. Their house goods, including earthen vessels and metal dining plates and drinking pots, are worth 10s. to £1 10s. (Rs. 5-15). Their staple food is Indian millet and millet bread, vegetables, salt, chillies, and pulse. They eat fish and the flesh of sheep, goats, fowls, hare, and deer, but not the flesh of the hog. Except the followers of a pir named Davalmani, all eat the dead bodies of cattle. They drink both country and foreign liquor and smoke tobacco and hemp-flower. Both men and women dress and wear ornaments like cultivating Marathas. They are hardworking, dirty, and

drunken. They work in leather, cut and dye skins, and make shoes sandals and water-bags. Their women help them. They work from seven in the morning to twelve, and again from two to seven. Besides as leather-dressers they work as husbandmen and labourers. They sell shoes at 1«. to 8s. (Rs. $\frac{1}{2}$ -1 $\frac{1}{2}$) the pair. Their appliances are the awl or ari worth about $\frac{3}{4}$ d ($\frac{1}{2}$.a.), the rapi or knife worth 3d. to $4\frac{1}{2}$ d. (2-3 as'.), a pair of kalbuts or shoe lasts worth 3d. to 4½d. (2-3 as.), and kolambes or water-pots worth about $\frac{3}{4}d$. ($\frac{1}{2}a$.). They buy sheep and goats' skins from Sultankars or Saktandars at 1s. to 3s. (Rs.½-1½) the skin; and mend shoes at \%d. to 3d. (\%-2 as.) a pair. Their deities are Mahadev of Shingnapur in Satara, Khandoba, Bahircba, and Bhavani of Tuljapur. They keep the usual Hindu fasts and feasts, and make pilgrimages to Pandharpur, Saptashringi, Nasik, and Benares. Their priests are Deshasth Brahmans to whom they show great respect. They have a religious head, a Gosavi generally called bava belonging to their own caste, who is greatly respected. They cannot tell where his head-quarters are, but he sometimes visits them, when they feast him and make him Presents of money varying from a penny to 6d. When a child is born they cot the navel cord and put it under the mother's pillow, along with a little sand and marsh grass. They keep a lamp burning in the mother's room and feed it for ten nights with costor oil and worship it for three days. They give the child honey and molasses mixed with water. After the third day the mother nurses it. On the fifth day they spread some grains of rice On a stone slab in the lying-in room and on the rice lay a silver or brass image of Satvai, and lay the navel cord before the image and the sand and sedge, and offer it rice, a piece of bread, and pulse. They sometimes kill a gost's in honour of the goddess. In the evening a feast is held and five unmarried girl's are fed and given, packets of betelnut and leaves. On the seventh day they make charcoal drawings on the outer walls of the house and worship them with red and turmeric powder and flowers, and offer wet gram. On the twelfth day, outside of the house, they worship seven pebbles, kill a goat, and feast seven married women. They name their children when they are eleven or twelve days or six weeks old, and clip the child's hair at any time between the third month and the third year. They marry their boys between font and twenty-five and their girls before they are sixteen. On the occasion of betrothal, ornaments are exchanged between the two houses, the boy is presented with a turban and sash, and the girl with a robe and bodice On a lucky day, one to three days before the marriage, the boy is rubbed with turmeric at his house, and a little is taken to the girl's by kinswomen and friends, where she is rubbed with it and presented with a robe and bodice. Her lap is filled with grains of wheat, dry cocoa-kernel, dates, and a packet of betelnut and leaves. On the

marriage day the boy is set on horseback and accompanied by kinspeople and friends goes with music to the temple of Maruti in the girl's village. Here the marriage coronet or bashing is tied on his brow and his father-in-law presents him with a tarban, a sash, a waist cloth, and a pair of shoes, and takes him to his house. When he reaches the girl's house a piece of bread is waved round his head and thrown away. The boy and girl are made to stand face to face in two bamboo baskets, a cloth or jamnika is held between them, and the priest repeats verses and throws grains of rice and millet on the boy and girl. At the lucky moment the *cloth* is snatched away and the guests clap their hands and throw grains of rice over the heads of the bride and bridegroom who encircle each other's necks with garlands of flowers and with yellow threads. Then on the marriages altar or bahule the sacrificial fire or lajahom is kindled, and each near relation and friend waves a copper coin over the heads of the boy and girl and sticks grains of rice on their brows. Except near relations and friends, the guests retire with a betel packet and the day ends with a feast. Next day a goat is killed is honour of the goddess Janai and a feast of mutton and ligor is mads. The boy, seated on horse-back with his bride and accompanied by relations and friends and music, goes to his house in procession. On the day after the boy returns to his house his father gives a feast to all his castefellows, the bride and bridegroom's yellow necklaces and turmeric wristlets are untied, they are rubbed with rice flour, and all traces of the turmeric are washed off. Deccan Charabhars allow widow marriage and polygamy, but not polyandry. They either bury or burn the dead. In either casel the body is washed with warm water and carried on a bier on a the shoulders of four men. Half-way to the burial ground the bier is lowered, a copper and few grains of rice are laid near the head, and each mourner drops five pebbles over the coin. The four bearers change places, and the body is carried to the buning ground. When they bury, the body is laid in the grave On it back and the chief mourner followed by the rest throws a handful of ashas over it and the grave is filled. When they burn, the chief mourner seta fire to the pile, and going round it thrice with an earthen jar filled with cold water, dashes the jar on the ground and beats his mouth. The party bathe, return to the chief mourner's house, and each taking a *nim* leaf in his mouth retires to his home. On the third day the chief mourner levels the moutjd over the grave, or if the body has been burnt, the ashes are thrown into some stream or river. They mourn the dead for ten days. On the tenth day wheat or rice balls are offered to the deceased, one is left for the crows, and the rest are thrown into water. The mourning ceremonies end on the thirteenth day with a dinner to castemen, and the gift of a turban to the chief mourner. They have a caste council, and settle social disputes

according to the opinion of the men of the caste. The faults against caste are eating pork, eating drinking or smoking out of the same pipe with a low-caste man or a Musalman, using abusive language towards the caste council, and having intercourse with a Mhar, Mang, or Bhangi woman. The punishments vary from asking pardon by bowing to the caste to the giving of a feast to the whole community. They send their boys to school till they are about twelve when they become useful in their calling. They complain that they are growing poor because people are taking to wearing English-shaped boots and shoes; still they are a steady if not a rising class.

PARDESHI CHAMBHARS, generally known as Mochis, are of several subdivisions. They claim descent from the saint Rohidas who flourished about the twelfth or thirteenth century of the Christian era. They are divided into Ahirva, Dhor, Jatve, Katai, Kulad, Madrasi, Bengali, Jangde, and Gujarati Mochis. Of these the Ahirva, Dhor, and Jatve Mochis eat together but do not intermarry. The surnames of the Ahir Chambhars are Chandere, Chhane, Korbhokre, Kuche, Phulmari, and Pole; people with the same surname cannot intermarry. The names in common use among men are Beni, Dhansing, Jivan, Hanu, Lalman, Mansing, Mohan, and Narayan; and among women Devaka, Jarani, Hiriya, Kashi, Muuiya, and Puniya. They look like low-class Pardeshis and speak Hindustani. They live in houses with mud walls and tiled roofs. Their house goods generally include queensmetal cups and saucers and earthen cooking vessels, a blanket, a guilt, and a carpet, and a wooden box and cot worth altogether 10s. to £2 (Rs.5-20). They sometimes employ men of their caste in their shops as labourers, paying them $4\frac{1}{2}d$. to 9d. (4-6 as.) a day. They sometimes keep sheep, goats, and fowls. Their stayle food is Indian millet or millet bread, pulse, vegetables, fish, and flesh, costing a family of five 16s. to £1 (Rs.8-10) a month. They give feasts of wheat cakes, rice, and vegetables at births, marriages, and deaths, a feast to a hundred guests costing about £1 (Rs. 10). They drink both country and foreign liquor and smoke hemp-flowers hand tobacco. The men wear Maratha turbans or headscarves, goats, waistcoats, short waistcloths, and English or native shoes the women dress in a petticoat and openbacked bodice, and wear an upper cloth drawn over the head. Women wear in the ears silver balis worth Is. 6d. (12 as.), gold necklaces or tiks worth about 4s. (Rs. 2), bracelets or todes of silver or tin, queensmetal anklets also called todes worth about 4s. (Rs. 2), and toe-rings or jodvis worth about 3d. (2 as.). They keep in store spare clothes worth £1 to £1 4s. (Rs. 10-12). They are hardworking, dirty, drunken, and hospitable. They make and Bell boots with elastic sides at 3s. to 10s. (Rs.1 $\frac{1}{2}$ -5) the pair and shoes at Is. 9d. to 3s. (Rs. $\frac{3}{4}$ -

 $1\frac{1}{2}$) the pair. They buy hides from Dhors at 1s. 3d. to 1s. 9d. (10-14) as.) the pound, a sheep or goat's skin for 1s. (8 as.), nails at $4\frac{1}{2}d$. (3 as.) a pound, elastic at 1s. 3d. to 1s. 6d. (10-12 as.) the yard, thread at $9\frac{3}{4} d$. $(6\frac{1}{2} as.)$ a pound, wax at 1s. 9d. (14 as.) the pound, and eight hundred rings for $7\frac{1}{2}$.d (5 as.). They earn 6d. to 1s. (4-8 as.) a day more than they spend. Their women help by twisting thread. Their boys are skilled workers at fifteen or sixteen and earn 3d. to 41/2d. (2-3as.) a day. Pardeshi shoemakers sew a pair of shoes in a day and a pair of boots in a couple of days. Their working hours are eight in the morning to six in the evening They believe in sorcery and witchcraft. Their family deities are Balaji and Bhavani of Tuljapur. Their priests are the ordinary Deshasth Brahmans, who conduct their birth, marriage, and death ceremonies. They make pilgrimages to Pandharpur, Kondanpur, and Tuljapur. They fast during the *Navaratras* in April, Janmashtami in August, and Ganesh-chaturthi and Anantchaturdashi in September, and feast on Sankrant in January, Shimga in March, Rakhi'ap-purnima and Nag-panchmi in August, Dasara in October, and *Divali* in November. They hold their women impure for five weeks after a birth and ever touch them during the whole of that time. The child's navel cord is cut by a Maratha or a Musalman midwife who is paid $7\frac{1}{2}d$ (5 a.). The midwife buries the navel cord in the lyingin room, and in the day of birth calls the child by a name which she is told by the Brahman priest. After the child is born the mother is laid on a guilt, never on a cot. On the fifth day a lighted iron lamp, two very small copper or silver plates stamped with the image of the goddess Satvai, five wheat cakes, some mutton, dry fish, rice, cooked and raw vegetables, and two copper anklets or vales are laid in a winnowing fan and worshipped. One plate is hung round the child's neck and the other is hung round the mother's neck and the anklets are put on the child's feet. The winnowing fan is given to a Mang woman, and at nigh a feast is held. On the tenth day boiled gram and betel packets are served to married women. On some suitable day daring the child's second year they shave a child's hair for the first time. For the first shaving she child's parents take it either to Tuljapur or Kondanpur, employ a barber at a cost of 3d. (2 as.) to shave it, while it sits on its maternal uncle's knee, and, when the shaving is over, they kill a goat and 'offer the goddess cooked mutton and liquor. They feast on sweet cakes mutton and liquor, present a goat's head and a cocoanut to the temple ministrant, throw the hair into the water, and return home. This ceremony costs about £1 4s. (Rs. 12). They marry their boys between ten and twenty and their girls between five and twelve. The families of the boy and girl do not interchange hospitalities and no flesh or liquor is used. They do not hold the cloth or antrapat between the boy and the girl during the marriage ceremony, but make them

walk seven times round a square pillar with in front of each face a pile of twenty-one earthen jars whitewashed and marked with green yellow and red. They burn the dead and mourn ten days. They allow child and widow marriage, and practise polygamy but not polyandry. They have a headman or *chaudhari* who settles social disputes in consultation with five of the elders. They send their boys to school till they are about twelve years of age. They are said to be suffering from the importation of European shoes which are better and stronger than those they make.

GAUNDIS.

Gaundis, or Masons, are returned as numbering 347 and as found in Bhimthadi, Junnar, Indapur, Poona, and Purandhar. They are divided into Gujaratis, Jats, Kamathis, Lingayats, and Pardeshis, who neither oat together nor intermarry. The surnames of the Gujaratis, to whom the following details apply, are Devatval, Dhavare, Kundalval, and Telpure; people with the same surname do not intermarry. The names in common use among men are Bhau, Mansaram, Nandaram, Sakharam, and Sundarji; and among women, Anandi, Godavari, Parvati, Rakhrna, and Shita. They are a well-made, tall, and fair people. The men wear the top-knot, moustache, and whiskers, but not the beard. Their home tongue is Marwari but with others they speak fairly correct Marathi. Most of them live in houses of the better sort two or more stories high, with walls of brick and tiled roofs. Except two or three houses which are worth about £10,000 (Rs. 1,00,000) a Gaundi's house costs £20 to £200 (Rs. 200-2000) to build. Their furniture includes metal and earthen vessels, cots, blankets, glass hanging lamps, and picture-frames. They keep cows, buffaloes, horses, and parrots. Their every-day food is millet, rice, wheat, split pulse, fish, and the flesh of goats sheep and fowls. The men wear a big loose turban half-Marwari and halt'-Marathi, a coat, waistcoat, waistcloth, shouldercloth, and Deccan Brahman shoes; and the women a petticoat or lungha, a short-sleeved open-backed bodice, and an upper robe and scarf which they fasten into the band of the petticoat and draw over the head like a veil and hold the end in their hand in front. They do not tie their hair in a roll behind the head, but let it hang down the back in braids. They do not use false hair or deck their hair with flowers. They mark their brows with redpowder, wear glass bangles, silver anklets or todes and toe-rings or jodvis valued at £3 to £4 (Rs. 30-40). They neither bore their noses nor tattoo their skins. They are hardworking, even tempered, sober, and thrifty. They are masons, contractors, dealers in grain and cloth, moneychangers, writers, husbandmen, and laborers. They also make clay images of

Ganpati and other clay figures. They are Vaislmavs and worship the usual Brahmanic gods and goddesses. They have house images of Balaji, Balkrishna,, Bhavani, and Ganpati, and their priests are the ordinary Maratha Brahmans to whom they show great respect. Their fasts and feasts are the same as those of other Brahmanic Hindus. They make pilgrimages and believe in sorcery and witchcraft. They consider a woman impure for ten days after the birth of a child till which nothing is done in the house. On the twelfth male and female relations, friends, and castefellows meet at the mother's house, put the child in a cradle, and name it. Each of the male quests is given a couple of betel leaves and a small sweetmeat or bundi ball and each of the female guests a handful of wet gram. A birth costs £1 to £4 (Rs.30-40). Atany time between a, child's first and third year, whether it is a boy or a girl, the hair-clipping or *javal* is performed. In the case of a girl only a few hairs are cut with a pair of scissors by the people of the house; the boy is seated on the knee of some elder either male or female, married or widow, and the barber shaves his head except the topknot; and is presented with a cocoanut and 6d. to 9d. (4-6 as.) in cash. They marry their girls before they come of ago and their boys before they are twenty-five. The asking or *magni* is the same as the Marathas' asking. Their marriage guardian or devak is the god Ganpati and five bet apples which they place on a betel leaf on heap of rice. They make marriage porches at both the boy's and the girl's houses. Instead of an altar at the girl's house they plant in the middle of the marriage hall a mango post with on each face an earthen cup like a clay lamp or *kodi* and cover it with another CUP. On the marriage day the boy goes on horseback in procession to the girl's accompanied by kinspeople and music, and sits in the house in front of the house gods on a carpet spread for him. The boy's father goes to where the girl is in the women's room, worships her, and presents her with clothes and ornaments. In these the women of the house dress her and the boy's father goes and takes his place in the marriage porch. The girl's father next comes to the boy, offers him clothes and ornaments, and loads him to the part of the marriage porch where the mango post is planted and seats him before the post on a carpet. The girl is now brought and seated to the right of the boy. The boy's priest on behalf of the boy says to the girl, 'Do not sit or my right but on my left.' She replies through her priest, 'If you promise to give me presents now and then and do not spend money without my leave, them I will do as you wish, otherwise I shall not'. The boy's priest promises that he will give her presents and not spend money, and the boy in confirmation says Yes. The girl takes her seat on the boy's left and the priest, holds a cloth between them and the mango post and repeats marriage verses. At the end of the verses the priest throws grains of rice over the heads of

the boy and girl and they are man and wife. Packets of betel leaves and nut are handed round and the quests retire. That night the boy stays at the girl's house. Next day, after a feast and the exchange of presents of clothes, the boy goes in procession with the bride to his house, and the marriage ends with a feast. Among them a girl is considered impure for four days when she, comes of age and on the fifth her lap is filled with a cocoanut and other fruit, and she joins her husband. When a Gaundi dies he is bathed in the house, dressed in a loincloth, laid on the bier and covered with a sheet. Near relations come with pieces of white cloth measuring three and a half feet long and spread them on the body. The bier is carried on the shoulders of four near relations, the usual halt is made on the way to the burning ground, and, at the burning ground, the body is burnt with the same details as at a Gujarat Vani's funeral. On the fourth day the chief mourner grinds a handful of wheat in a handmill from left to right that is contrary wise or *ulate*, and makes the flour into three small cakes. He takes the cakes and a water-pot and goes to the burning ground. On the way he leaves one cake on the spot where the halt was made and the bier was rested. In the burning ground he removes the ashes and throws them into water, and after sprinkling a little cowdung and water lays the two cakes on the spot, and after a crow has pecked them returns home. On the tenth day ho goes to a stream, prepares rice balls, throws them to the spirit of the dead in the water, and returns home. On the eleventh day he feasts the caste. They hold caste councils and settle social disputes at meetings of the castemen. Few send their boys to school. Some of them are rich and the rest are well-to-do.

GHISADIS.

Ghisa'dis, literally Polishers or Tinkers, numbering 444, are returned as found in Indapur, Purandhar, and in the city of Poona. Their name seems to come from the Marathi *ghisne* to rub. According to their own story they are called after a certain Ghisadi who overcame and killed a famous gymnast. They say that they came to the Deccan from Gujarat in search of work. They have no subdivisions among them; all Ghisadis eat together and intermarry. Their surnames are Chavan, Charvase, Katkar, Padvalkar, Povar, Salunke, Selar, and Sinde; persons having the same surname cannot intermarry. The names in common use among men are, Bhikaji, Kushaba, Mahaduba, Malhari, Manaji, Rakhmaji, Santu, Tukararn, and Vaghu; and among women Girjabai, Jankubai, Jayibai, Kusabai, Rakhmabai, and Taibai. They addji as' Ramji to men's names and *bdi* a Jankubai to women's names. Both at home and abroad they speak a corrupt Gujarati, a mixture of Gujarati

Marathi and Hindustani. Both men and women dress in Marathi fashion and look like Kunbis except that they are a little shorter and sturdier. The men are strongly made and many of them are trained gymnasts. They wear top-knots and beards and their faces are generally covered with long thick hair. The head hair is lank, Most of them live in poor houses or huts one storey' high with walls of brick and tiled roofs. Those of them who wander from place to place fix two forked polos in the ground, lay a third pole in the forks of the two uprights, and stretch a cloth or large blanket called pal over the horizontal pole so as to form a tent with sloping sides and open ends. The sides are pegged to the ground ' and the back is closed with blankets. In their tents are generally a cot cradle, blanket, quilt, carpet, one or two low wooden stools, and clay or metal cooking vessels. They sometimes have a few cattle, bullocks, goats, asses, or ponies, and occasionally keep a deer or a hare as a pet, and pigeons and poultry. Their staple food is millet, rice, pulse, and spices. They eat goats, sheep, deer, hare, poultry, and eggs on holidays and whenever they can afford it; they also drink liquor and indulge in many native intoxicating drugs. They are moderate eaters and good cooks being specially fond of pungent dishes. They wear a waistcloth or short breeches, a shouldercloth, a jacket, a sadra or loose shirt, a Maratha turban, and shoes. The women plait the hair in a braid and do not deck it with flowers. Out of doors they wear the ordinary Maratha robe and bodice, and at night a lungha or petticoat. As a class they are hardworking, quarrelsome, dirty, extravagant, and fond of drink. Their chief calling is working in iron. Youths begin to learn from their fathers or elders about ten or twelve, and when they have mastered the work they open shops of their own.

The men work from seven to twelve and again from two to eight. The women help in blowing the bellows. They also go about selling; the wares made by the men. They generally prepare articles for sale at their own cost and risk. In spite of the competition of European hardware their articles are in good demand, though their profits have been reduced. They earn enough for their support, but several fall into difficulties by borrowing to meet marriage and other expenses. They rank themselves with Marathas and do not associate with the classes who are generally considered impure. Other classes look down on them and do not give them the position they claim. Their slack time is during the rains between June and October, and all the year round they close their shops on *lunavasya* or the last day of the month. The family deities of Ghisadis are. Bahiri, Balaji of Giri in the Madras Presidency, Bhavani, Khandoba, Satvai, and Yamnai, and they also worship village and boundary gods whom they offer milk and sugar

without the help of a priest. Their family priest is a Deshasth Brahman who is called to officiate at marriages, lap-fillings, and deaths. They make pilgrimages to Alandi, Dehu, Jejuri, Pandharpur, and Tuljapur. They fast on elevenths or ekadashis and on all Mondays and Saturdays. Their chief festival is the nine nights before *Dasara* in September-October, a They believe in and consult astrologers and soothsayers. They often suffer from spirit-possession. When a disease does not yield to the ordinary cures or when the symptoms are considered to point to spirit-possession a devrishi or exorcist is called. He takes ashes and waves them round the sick together with a cocoanut, a hen, and some lemons. If this does not drive away the spirit they pray to their family gods to help them and promise to reward their gods if they grant their prayers. When a woman is in child-birth a midwife is called in. When the child is born the midwife bathes the mother and child cuts the navel cord, and buries it in an earthen pot in the spot where the mother was bathed. The woman is laid on a cot and given balls of wheat flour mixed with clarified butter and sugar, and for three days the babe is given honey and castor oil. On the fifth day the mother and the child are purified and their clothes are washed. They cover the vessel in which the clothes were washed with a piece of new cloth. Five stones are laid on the cloth, and the mothers worships them as the abode of Satvai. Near the stones is placed as image of Satvai to which the mother offers turmeric, red powder sandal paste, and flowers. A goat is offered to the goddess and killed the head is cut off and laid before the image, and friends and relations are called to feed on the flesh. After dinner, the women of the house remain awake all night and keep a light in the room. Next day the head of the victim is cooked and eaten. On the fifth the child is clothed in a cap and a small armless frock or kunchi somewhat peaked at the top and drawn over the head like a cowl of hood. On the seventh the image of Satvai is laid at the door of the lying-in room and is worshipped with wet wheat and gram. On the day no outsider is asked to dinner. At night neighbouring women come and laying the child in the cradle name it and sing a cradle song to Ram or Krishna. When the song is over betel and boiled wheat are served and the women retire. Either after the eleventh or after the twentieth the mother goes about the house as usual. The heads of all children, whether boys or girls, are shaved, between their ninth month and the end of their fourth year. The child is seated on the lap of its maternal uncle and its head is shaved by the barber who is paid about 2d. (1/3) anna). Goats are killed and friends and relations feasted. They marry their girls between five and twenty-five and their boys between seven and thirty. When a father thinks it right that his son should be married he calls some of the castemen and asks if they know any suitable

match. They discuss the different available girls and fix on one as the best match. The boy's father with some friends goes to the girl's father and asks if he will give his daughter in marriage. The girl's father consults his wife. If the wife agrees the fathers compare their surnames and mention their marriage connections, and if there is nothing to prevent the marriage they agree that it shall take place. The boy's father gives the castemen 10s. to 16s. (Rs. 5-8) and the caste women 4s. to 6s. (Rs. 2-3). These sums are spent in liquor which is drunk at a meeting of the caste. On the first holiday after the asking or magni the boy's parents present the girl with a new robe and bodice. Next June or Jyeshth a basket is filled with mangoes, uncooked rice, pulse flour, and two bodicecloths or khans, and taken to the girl's by the women of the boy's house. They present the girl and the women of her family with turmeric and redpowder, deck the girl's hair with flowers, and fill her lap with rice, betelnut, almonds, and cocoanuts, and give one bodicecloth to the girl and the other to her mother. In the following Shravan or August a Shravan basket, of toys two bodicecloths and uncooked rice and pulse, is made ready in the boy's house and taken to the girl's with pipes and drums. The girl is seated on a low stool, her lap is filled with the fruit, and her brow is marked with a circle of redpowder. Before the marriage the boy's father in presence of some of the caste has to pay the girl's father £2 10s. to £10 (Rs.25-100). The witnesses take £1 (Rs. 10) in the name of the caste and spend it on liquor which all drink together. Then the girl's father buys the marriage clothes, and marriage porches are set up at the boy's and girl's houses, the girl's porch having an altar or bahule. On the day before the marriage the bridegroom goes to the bride's with his friends and relations, where the girl's father has prepared some place for them to live in. The girl is first rubbed with two or throe lines of turmeric, and the bridegroom is next bathed and rubbed with turmeric by the washerwoman. After being rubbed the bridegroom goes to a temple of Maruti with a party of friends, takes a small mango branch which has been cut and placed near the god, and makes it his marriage guardian or devak tying it to one of the poles in the marriage porch. Then the washerwoman of each of the houses ties, by a yellow string of five Strands, a piece of turmeric wrapped in cloth to the right wrist of the bride and of the bridegroom, and the day ends with a feast of telchis or cakes and gulkadhi or molasses curry to friends and acquaintances. On the next or marriage day the bridegroom visits the temple of Maruti, whore the father of the bride presents him with a shouldercloth, a turban, and a pair of shoes and fastens to his brow the marriage coronet or bashing. The bridegroom bows to the god and follows the bride's father to his house. At the door of the marriage porch a cocoanut is waved round the bridegroom and

broken. He then enters the porch and stands on a low wooden stool. The bride is brought in and made to stand feeing him separated by a cloth. The Brahman priest repeats marriage verses and when the verses are over the boy and girl are husband and wife. The boy then fastens the lucky string or *mangalsutra* round the girl's neck and at the same time his sister adorns her feet with silver toe-rings or virudhyas. Then the boy and girl are made to sit. The Brahman priest circles them ten times with a thread. He cuts into two the band of ten threads, and, passing each thread in each half of the band through a pierced betelnut and repeating texts, ties the ten betelnuts as a bracelet round the right wrist of the boy and the girl. They are then seated on the altar and the girl's father presents the boy with a copper water-pot or tambya and a tin cup or rati and some other articles. This part of the ceremony is called *kanyadan* or girl-giving. Next the Brahman priest kindles a sacred fire in front of the boy and girl who are seated side by side and the boy throws clarified butter over the fire. Then the boy and girl walk round the fire thrice, into the house, and bow before the gods. The day ends with a feast. On the day after the wedding the girl's father gives a caste-feast of mutton and cakes. In the evening the *varat* literally crowd starts, from the house of the girl, when she receives a new robe and bodice from the boy's father, and with drums and pipes is brought on horse-back with her husband to his house. At his house the boy and girl bow before the house gods, and in the presence of a party of married women each unties the other's betelnut bracelets. On the next day the boy's relations bathe him and his wife, and they dine from the same dish in company with the boy's parents, five married women, and the bridesmaids or karavlis who are generally the sisters of the boy and girl. At night the boy's father gives a mutton feast to the caste-people and the marriage guardian or devak is taken away. When a girl comes of age she is considered unclean and is made to sit by herself for four days. On the fifth day she is presented with a new robe and bodice, and her mother fills her lap with fruit and feasts her son-in-law's family. During the seventh month of her first pregnancy she is asked to dine at her mother's and presented with a green robe and bodice and glass bangles. When a death occurs in a house the caste people are told of it and the women sit weeping and wailing. When the mourners gather at the deceased's house one or two relations go and bring what is wanted for the burial. A bier is made ready outside of the door and an earthen vessel is filled with water and set on a fire. The body is taken out of the house, washed with hot water, and laid on the bier. The face is kept uncovered. The body is covered with a cloth fastened to the bier with a string and a thread of five colours, and a roll of betel leaves is placed in the mouth. Then the chief mourner puts burning cowdung

cakes into an earthen jar, and holding the fire-pot in a sling begins to walk and the bearers follow him. On the way, as they near the burning ground, the bearers stop and lay the bier on the ground and place on the ground some balls of wheat flour. The bearers change places and carry the bier to the burning ground. At the burning ground they heap the pile with dry cowdung cakes and lay the body on the heap. The chief mourner dips the turban of the deceased in water and squeezes some of the water into his mouth. A ball of wheat flour is laid under the corpse's head and the body is covered with dry cowdung cakes and set on fire. When the fire is kindled on all sides the chief mourner brings a pitcher of water on his head. Along with another man he stands for a few seconds at the feet of the dead. His companion makes a small hole in the bottom of the jar, and as the water begins to trickle out the mourner walks round the pyre. He walks thrice round, his companion each time piercing a fresh hole. At the end of the third round the chief mourner dashes the pot on the ground, cries aloud, and beats his month with the back of his right hand. The funeral party bathes and goes to the house of the dead, where a neighbour purifies them by pouring cow's urine over them, and they leave. On the third day kinswomen or the widow herself cuts off her lucky necklace and breaks her glass bangles, and, along with a winnowing fan in which two dough cakes are laid, the chief mourner and the bearers take the necklace and bangles and go to the burning ground. On the way the body is rested and the chief mourner leaves one of the cakes. At the burning ground when the body is consumed the ashes are gathered and thrown into water. The spot where the body was burned is cowdunged and the necklace, the pieces of the bangles, and the second dough cake are laid on it. They go to the river where the chief mourner rubs the shoulders of the bearers with butter and they return to the chief mourner's house where they dine. They mourn for ten days. On the eleventh the chief mourner is taken to the river and is made to kindle a fire. A barber comes and shaves his head except the top-knot and his face except his eyebrows. All bathe in the river and return home. The chief mourner makes eleven dough balls and two cakes. The balls he Worships and offers them the cakes and a little wet wheaten flour. He takes a ball eleven times in succession and places it at the bottom of the river or water and bathes, and a sacred fire is kindled by a Brahman priest. The chief mourner bows to the fire, throws clarified butter, dates, cocoa-kernel, sesamum, and barley upon the fire, walks round it, and salutes it. The rest of the party pour a potful of water on the burnt offering and go home On this day she Brahman priest receives an umbrella, a pair of shoes, and a lanket. Caste-people are asked to dine at the house of mourning but only a few come. On the twelfth the friends and relations of the chief

mourner raise a sum of money, and, buying provisions, poinding mutton, feast on them in company with the chief mourner, and give him a cup of liquor, and some one of his relations resents him with a turban. On the death-day a memorial or *mraddh* ceremony is held. The Ghisadi community is very often disturbed by quarrels. They have no headman and their caste disputes are settled according to the opinions of the majority and their decisions are obeyed on pain of loss of caste. Breaches of caste rules are punished by fines varying from 2s. to £1 (Rs. 1-10). A woman who commits adultery is fined 9d. (6 as.) and a caste dinner is held to mark the event. Within the last eight years they have begun to send their boys to school, but they take them away from school and make them begin to work when they are They do not take to new callings and on the whole are well-to-do.

HALVAIS.

Halva'is, or Sweetmeat-sellers, are returned as numbering sixty seven and as found in Sirur, Purandhar, and Poona. They are divided into Ahirs, Jains, Lingayats, Marathas, Marwaris, Pardeshi Shimpis, and Telis. The Pardeshi Halvais have no surnames. The names in common use among men are Bihyari, Dagadu, Gangari Kisan, and Ramdads; and among women, Bhagu, Ganga, Jamu Lachhu, and Tulsa. They are Pardeshis and look and speak like them. They live in middle-class houses with walls of brick as mud and tiled roofs, and have metal and earthen vessels. The have servants whom they pay 14s. to 16s. (Rs. 7-8) a month. Their staple food is millet, rice, wheat, pulse, butter, spices, and vegetable but they eat fish and flesh, and drink liquor. The men wed waistcloth, a waistcoat, and a headscarf or Maratha turban, the women a petticoat and an open-backed bodice and draw piece of cloth over the head. They are hardworking, but hot-tempered and intemperate, drinking liquor and smoking opium and hemp. They make and sell sweetmeats at the following rates: Boiled milk made into paste two pounds the rupee, pedhm balls of boiled milk two to two and a half pounds, barphi or sqd pieces of boiled milk mixed with sugar and spices one and half two pounds, khobaryachi barphi or cocoa scrapings two and a to three pounds, the same mixed with saffron two to two and quarter pounds, sugar peas or sakhar-phutane mixed with sugar and sesamum two and a half to three pounds, vehlode or sugar cardamums two pounds, sugared kaju or cashewnuts two and a pounds, sdbania or sugar sticks two and a half pounds, ready sugar and sesamum cakes five and a half pounds, bundi or balls and quarter pounds, salt and sweet shev four pounds, and quda of molasses and groundnuts eight pounds. Their women do help the men. Their boys begin to learn their father's craft twelve and are expert at twenty. A

boy's marriage costs s £20 (Rs. 200), a girl's marriage about £10 (Rs. 100), and all about £2 10s. (Rs. 25). Their family deities are Khand Bhavani, Krishna, and the Devi of Chatarshringi. Their pried Kanoj Brahmans. They keep the regular local fasts and f but the Ashadhi or June-July and the Kartiki or October-Novell ekadashis or lunar elevenths are their great fast days, and H February, Nag-panchmi in July, Ganesh-chaturthi in August Dasara and Divali in October are their great feast days make pilgrimages to Benares, Oudh, Jejuri, Pandharpur, shringi, and A'landi. They believe in sorcery and witch and consult oracles. On the fifth day after the birth of a they lay five millet stems on a stone slab with a cake stuck in point of each, worship them with turmeric and redpowder offer them cooked rice, curry, vegetables, and boiled grams mother is impure for eleven days. On the twelfth and thirteenth days she goes to some garden, worships five pebbles, feasts five married women, and returns home. In the evening the child is named in presence of near relations and friends, boiled gram betel packets and sugar are served and the guests retire. They clip a child's hair when it is five years old. They marry their girls between seven and twelve, and their boys before they are twenty. The day before the marriage the boy is rubbed with turmeric at his house and what is over is sent to the girl's. Then wristlets or kankans one a small iron ring the other a turmeric root rolled in a piece of new yellow cloth, are fastened to the wrists of the boy and girl and a feast is held at both houses. Their marriage quardians or devaks are their house deities whom they send to a goldsmith, and after being polished bring home accompanied with music. In the evening of the marriage day the boy is seated on a horse, a dagger is placed in his hands, and he is taken to the girl's accompanied by kinspeople, friends, and music. At the girl's a lemon, a cocoanut, and a piece of bread are waved round his head and thrown aside. The boy is taken into the house and seated on a low wooden stool and the girl on a second stool on his left. The sacrificial fire is lit and the boy kindles it with dry mango leaves and butter. The girl's father washes the boy's and girl's feet and touches his own eyes with the water. The girl is presented with a nosering and silver toe-rings and a cloth is held between the sacrificial fire and the boy and girl. Then the boy and girl together make seven turns round the sacrificial fire, stopping and taking the advice of the elders before they make the seventh turn. The priest repeats the marriage verses and when the verses are over throws grains of red rice over the heads of the boy and girl and they are man and wife. The hems of their garments are tied together and they go and bow before the house gods. The boy and girl are seated on a horse and taken in procession to the boy's house and next day the marriage festivities end with a feast. They burn their dead and mourn ten days. They allow widow

marriage and polygamy. They have a caste council and send their boys to school. As a class they are well-to-do.

JINGARS.

Jingars, a Persian term for saddle-makers whose Hindu name seems to be Chitrakars or Painters and who style themselves Arya Somvanshi Kshatris or Arian Moon-branch Kshatris, are returned as numbering 650 and as found over the whole district except in Purandhar. The local head-quarters of the caste is the city of Poona where at their caste feasts between ten and eleven hundred plates are laid. They say that the Brahmand-puran has the following account of their origin. The gods and sages were once engaged in performing a sacrifice in Brihadaranya, when Janumandal, a giant, the grandson of Vritrasur, endowed with Brahmadev's blessing and made invincible, appeared with the object of obstructing the sacrifice. The gods and sages fled to Shiv. In Shiv's rage a drop of sweat fell from his brow into his mouth. It assumed human form and-was called Mauktik or Muktadev. Muktadev fought with Janumandal and defeated him. The gods and sages, pleased with his prowess, enthroned him as their king and went to the forests. Muktadev married Prabhavati, the daughter of the sage Durvas, by whom he had eight sons, who married the daughters of eight other Rishis. Be left the charge of his kingdom to his sons and with his wife withdrew to the forest to do penance. In the height of their power the sons one day slighted the sage Lomaharshan who cursed them saying that they would lose their royal power and their right to perform Vedic ceremonies and would wander in misery. Muktadev, on coming to know of the curse, implored Shiv to have mercy on his sons. Shiv could not recall the sage's curse, but to lessen its severity added that Muktadev's sons might perform the Vedic rites stealthily, that they would be known from that day forward as Aryakshatris, and would follow eight callings, chitragars or painters suvarnagars or goldsmiths, shilpkars or artists, patakars or weavers, reshim karmi and patvekars or silk-workers, lohars or ironsmiths, and mritikakars and dhatu-mritikakars potters and metal and earth workers. They have no subdivisions. Their surnames are Chavan, Dhengle, Jadhav, Malodker, Kamble, Navgire, and Povar. The names in common use among men are Anantram Bapu, Ganpati, Namdev, and Sakharam; and among women Bhima, Lakshmi, Radha, Sakhu, and Savitri. They have eight family stocks or gotras, the names of six of which are Angiras, Bharadvaj, Gautam, Kanva, Kaundanya, and Vashishth. The men are generally dark with regular features; the women fair thin tall and proverbialy handsome. The men wear the topknot and moustache, and rub sandal on their brows. They shave their

heads once a week. The local Hajams or barbers refuse to shave them, and they employ Paredeshi Hajams. The women mark the brow with redpowder, and tie the hair in a knot behind. They do not use false hair or deck their head with flowers, as they hold these practices fit for prostitutes or dancing girls. They speak Marathi, and are hardworking, intelligent, clever self-reliant, even-tempered, hospitable, and orderly. Their skill as craftsmen was rewarded by the Peshwas with gifts of land and houses. They follow a variety of callings, casting metal, carving stonges painting, making figures of clay and cloth, carving wood, and repairing boxes padlo'cks and watches. From the calling they adopt they are sometimes called Sonars or goldsmiths, Tambats or coppersmiths, Lohars or blacksmiths, and Patvekars or silk-workers. Their houses are like those of other middle-class Hindus one or two storeys high with walls of brick and tiled roofs. The furniture includes metal and earthen vessels, boxes, carpets, glass globes, and picture frames. Some keep a cow or she-buffaloe, a pony, and parrots. Their staple food is rice, millet and Indian millet, split pulse, and vegetables. They do not object to eat the flesh of goats sheep, poultry, deer, hare, or partridges. They drink country ligour, but not openly. The men dress like Deccan Brahmans in a waist cloth and shouldercloth, a coat and waistcoat, a Brahman turban, and shoes. A Jingar rises at five, works from six or seven to eleven or twelve, and again from two to dusk. The women mind the house and sometimes help the men in their shops. Boys begin to help their fathers at twelve and are expert workers by sixteen or eighteen They are Vaishnavs in religion and have house images of Ganpati Vithoba, Bahiroba, Khandoba, and Bhavani. Their priests are the village Brahmans who officiate at their houses and whom they hold in great reverence. They keep the usual Hindu fasts and feasts. On the morning of the fifth day after a birth the child is bathed and rolled from head to foot in a piece of cloth and laid on the bare ground. The mother bathes for the first time, and is seated on a low wooden stool, and the child is given into her arms covered with swaddling clothes. Either in the morning or evening the midwife places in the mother's room a grindstone or pata and lays on the stone a blank sheet of paper, an ink-pot, a pen, the knife with which the child's navel cord was cut, and healing herbs and roots. The midwife then worships these articles as the goddess Satvai, offering them grains of rice, flowers, and cooked food. The mother lays the child on the ground in front of the goddess, makes a low bow, and taking the child uncovers its face and rubs its brow with ashes. During the night the women of the house keep awake. On the seventh day, either in the mother's room or somewhere else in the house, seven lines each about three inches long are drawn on the wall with a piece of charcoal and worshipped as Satvai and wet gram is offered. The tenth,

eleventh, and twelfth day ceremonies are the same as those observed by Deccan Brahmans. For five months the child is not bathed on the day of the week on which it was born. If the child is a boy, on a lucky day, either within eleven months from its birth or in its third year, its hair is cut with scissors for the first time. If the child is a girl, who is the subject of a vow, her hair is cut as if she were a boy and with the same ceremonies which Brahmans observe. At the age of three the boy's head is shaved for the first time. The Jingars strew part of the floor with grains of rice and on the rice spread a yellow-edged cloth, and seat the boy on the cloth in front of the barber who shaves the boy's head leaving only the top-knot. The boy is anointed with oil and bathed, and dressed in new clothes, and each of several married women waves a copper coin round his head and presents it to the barber with the yellow-edged cloth and the uncooked food. When a boy is five, seven, or nine, he is girt with the sacred thread in the month of Shravan or August-September when thread-wearing Hindus yearly change their threads a ceremony called Shravanya. The boy is seated with some men who are going to change their threads, and the officiating Brahman is told that the boy is to be given a sacred thread. The boy, along with the others, marks his brow from left to right with ashes or vibhul, rubs cowdung and cow's urine on his body, and worships seven betelnuts set on seven small heaps of rice as the seven scers or sapta-rishis. The sacrificial fire is lit and fed with butter and email pipal sticks by the boy and the others who are changing their threads. Those whose fathers are dead perform the memorial or shraddh ceremony, and when this is over, the priest presents each with a sacred thread which is put on and the old one is taken off and buried in a basil-pot. The ceremony costs the boy's father about 4s. (Rs. 2). They marry their girls before they are twelve, and allow their boys to remain unmarried till they are thirty. When a marriage is settled the first ceremony is the redpowder rubbing or kunku. The boy, his father, and a few near kinsmen go to the girl's with a coin or a necklace of coins, a packet of sugar or sakharpuda, and betelnut and leaves. At the girl's, when they have taken their seats, the girl's father calls the girl. When she comes the boy's father marks her brow with redpowder, fastens the necklace of gold coins round her neck, and puts the packet of sugar in her hands. She bows before each of the guests and retires. The guests are served with betel, and retire. From a day to a year after the redpowder rubbing comes the asking or magni, which is also called the sugar-packet or sakharpuda. The boy, his parents, and a few kinspeople go with music to the girl's house, and, after being seated, the girl is called by the boy's father and presented with a robe and bodice which she puts on. She is decked with ornaments and presented with a packet of sugar or sakharpuda.

The girl's father worships the boy, and presents him with a sash, a turban, and sugar, and after betel packets have been served they retire. A week or two before the wedding the boy's and girl's fathers go to the village astrologer with the two horoscopes and settle the day and hour on which the marriage should take place. This the astrologer notes on two papers which he hands to the boy's father, who keeps one for himself and makes over the other to the girl's father. Each of the fathers gives the astrologer $1\frac{1}{2}d$. to $1\frac{3}{4}d$. (1-1\frac{1}{4} as.) and they take him with them to the boy's house. Here some castemen are met and the astrologer reads the two papers to them. The brows of the guests are marked with sandal, the boy is presented with a sash and turban, and the guests retire with betel packets. Three days before the marriage, unlike Deccan Brahmans, the boy is rubbed with turmeric at his house, and married women, with music, take what remains to the girl's with a green robe and bodice and wet gram. The girl is rubbed with the turmeric, bathed and dressed in the new robe, and the boy's party retire with a present of a waistcloth, turban, and sash for the boy. Their marriage guardian or devak is their house goddess or kuldevi, on whom they throw a few gains of rice, and call her the marriage quardian. Their marriage hall lucky-post or muhurt-medh is a pole whose top is crowned with hay and a yellow cloth in which are tied a few grains of red rice, a betel packet, and a copper coin. The rest of their marriage, puberty, and pregnancy ceremonies are the same as those observed by Deccan Brahmans. They burn their dead, and, except that they make small heaps of rice, their death ceremonies do not differ from those of the Deccan Brahmans. On the spot where a funeral pile of cowdung cakes is to be raised the chief mourner sprinkles water and makes five heaps of grains of rice towards the south, thirteen towards the west, nine towards the north, and seven towards the east. In the middle he makes three heaps, and throws over them five cowdung cakes and the rest of the mourners raise a pile, lay the body on the pile, and set the pile on fire. They have a caste council and their social disputes are settled by meetings of the castemen. They send their boys to school, but only till they are about eleven or twelve, when they begin to work in their fathers' shops. As a class they are well-to-do. The Jingars, or as they call themselves Somvanshi Kshatriyas, hold a peculiar position among Decan Hindus. Though their appearance seems to entitle them to a plance among the upper classes the upper classes do not give them such a position. They are isolated and dialiked, by some even considered impure. A few years ago the Poona barbers refused to shave the Jingars on die ground that they were impure. This one of the Jingars resented and brought an action of libel against the barber, but the charge was thrown out. The reason alleged by the people of Poona

for considering the Jingars impure is that in making saddles they have to touch leather. It is doubtful if this is the true explanation of their isolated position. Others say that the origin of the dislike to the Jingars is their skill as craftsmen and their readiness to take to any new craft which offers an opening. Their name of Panchals is generally explained as panch chal or five callings, namely working in silver and gold, in iron, in copper, in stone, and in silk. This derivation is doubtful, and in different districts the enumeration of the five callings seldom agrees. In 1869 Sir Walter Elliot gave an account of the Panchals of the Karnatak and South India. [Journal of the Ethnological Society of London, I. 111 -112. He notices the rivalry between the Panchals and Brahmans, and that the Panchals are the leaders of the left-hand castes as the Brahmans are the leaders of the right-hand castes. He thinks this division into left and right castes and the peculiarly isolated social position of the Panchals are due to the fact that they were they were once Buddhists, and perhaps in secret still practise Buddhism. Sir Walter Elliot learned from a Panchal, over whom he had influence, that though they professed the worship of the Brahamanic gods they had priests of their own and special religious books. The Panchal showed him an image which they worship. The image is seated crossed-legged like a Buddha, and Sir Walter Elliot thought it was Gautam Buddha. Still this cross-legged position, though Buddhist, is not solely Buddhist, and it seems insufficient to prove that the Panchals are Buddhists at heart. If they are Buddhists the name Panchal may originally have been Panchashil the Men of Five Rules, an old name for the Buddhists. Some accounts of the Konkan and Decern Panchals seem to show that as in the Karnatak they have special holy books. This the Poona Panchals deny, and attempts to gain further information regarding them have failed.

KACHARIS.

Ka'cha'ris, or Glass-Bangle Makers, are returned as numbering sixty-five and as found in Haveli, Purandhar, and Poona. Of their origin or of their coming into the district they know nothing. They are divided into Marathas and Lingayats who do not eat together or intermarry. The surnames of the Lingayat Kacharis are Bharte, Birje, Dokshete, Gandhi, Kadre, and Mai hare, and people with the same surname do not intermarry. The names in common use among men are Khan do ba, Lakboba, Naroba, Shivba, and Sitaram; and among women Bhagu, Elma, Gaya, Savitri, and Yamna. They look like Lingayats and are dark and strong. The men wear the top-knot, moustache, and whiskers. Their home tongue is Marathi They live in houses with mud walls and tiled roofs, containing cots, cradles, boxes, gnilts, blankets, and metal

and earthen vessels. They have no servants, but sometimes keep cows, buffaloes, and she-goats. Their staple food is millet, split pulse, and vegetables, and they are fond of pungent dishes. They neither eat fish or flesh nor do they drink liquor. They smoke tobacco and hemp or gania. Both men and women dress like Marathi Brahmans, except that the women do not draw the skirt back between the feet and tuck the end into the waist behind. They do not deck their hair with flowers or wear false hair. They are sober, thrifty, hardworking, and hospitable. They make black and green glass bangles. They buy broken pieces of bangles from Marwar Vanis and other hawkers, melt them, and cast them afresh. They sell ordinary bangles to wholesale dealers at four pounds for 2s. (Re. 1) and *lapeta* or bangles joined together with wires at 1s. or 1s. 6d. (8-12 as.) the thousand. Their working tools are earthen pots, a mus or pestle and an iron bar or salai. The women do not help the men. A man can make about a thousand bangles in a day. They earn 16s. to £1 (Rs.8-10) a month. A marriage costs £2 10s. to £20 (Rs.25- 200), and a death 10s. (Rs. 5). They are Lingayats and their teachers are Jangams. They settle social disputes at meetings of the castemen. They do not send their boys to school, and suffer from the competition of Chinese and other bangles.

KASARS.

Ka'sa'rs literally Brass-makers, now Glass-Bangle Hawkers, are returned as numbering 2755 and as found all over the district They say they came into the district from Ahmadnagar, Kolhapur, Sangli, Miraj, and Satara, during the Peshwas supremacy (1713-1817). They are divided into Maratha and Jain Kasars. The following details apply to the Maratha Kasars. They are dark, middle-sized, and thin. They speak Marathi and most of them live in houses of the better sort, one or two storeys high, with walls of brick and tiled roofs. Their staple food is millet, pulse, vegetables and occasionally rice; they also eat fish and the flesh of sheep, goats poultry, hares, deer, and partridges, and drink both country and foreign liquor. They smoke tobacco and hemp. The men wear the waistcloth, coat, waistcoat, shouldercloth, and Maratha or Deccan Brahman turban and shoes. The women dress in a Maratha bodies and a robe whose skirt is drawn back between the feet and the end tucked in behind. The men wear the 'top-knot, the moustache, and sometimes the whiskers, but not the beard. The women tie the hair in a knot behind, but do not wear false hair or deck their hair with flowers. Their clothes are both country and Europe made and they have no special liking for gay colours. Like Marathas they wear ornaments of silver gold and queensmetal. They are hardworking thrifty, even-tempered, hospitable, and orderly. They

deal in glass and wax bangles and make lac bracelets. In the morning and again about midday they move about with bundles of bracelets slung across their shoulders and in their hands, crying Ghya bangdya, Have bangles. The bangles are of many kinds, are sold single, and vary in price from 1d. to £1 (? anna - Rs.10) the dozen. The names of the chief sorts are ambali, anar, anaras, asmani, bilori, chai, champa, dalambi, ducha, gajra, galas, gandaki, ghas, gulab, gulkhar, hirva, jaributi, jhirmi, kachekairi, kajli, kanji, kapiv, kathva, khula, dalimbi, khuldmotia, koldvatar, morchut, morpisi, motia, motikdapiv, nagmodi, narangi, nurirat, parvari, phulguldb, piroz, pistai, pivla, rajvargi, rashi, sakarka, soneri, tulshi, and valshet. The bangles are put on the buyer's wrists by the seller, and if a bangle breaks while the hawker is putting it on the loss is his. Women set great store on tight-fitting bracelets and some Kasars can work the hand in such a way as to force over them the most astonishingly small bracelets. Kasar women and children help the men in their calling, making and selling bangles and putting them on the buyers' wrists. These Kasars also make and sell copper and brass vessels. They are Brahmanic Hindus and have house images. Their family god is Khandoba and their chief goddess is Bhavani of Tuljapur. Their priests are Deccan Brahmans. They make pilgrimages to Pandharpur, Jejuri, and sometimes to Benares. Mahashivratra in February and the lunar elevenths or ekadashis of every month are their fast days. Their feasts are Shimga or Holi in March-April, New Year's Day or *Gudi-padva* in April, *Nag-panchmi* or the Cobra's Fifth in July, Ganesh-chaturthi or Ganpati's Fourth in August, *Dasara* in October, and *Divali* in October-November. They have no spiritual teacher or guru. When a Kasar's child sickens its parents set cooked rice, curds, an egg, redlead, a lemon, and needles on a bamboo basket or padli, and wave the basket round the child's face, and lay it at the street corner, a favourite spirit haunt. Or they wave a fowl round the sick child's head and set the fowl free. They worship the goddess Satvai on the fifth day after the birth of a child and name the child on the twelfth. They clip a boy's hair between one and five," marry their girls before they are twelve, and their boys between twelve and twenty-four. They burn their dead and mourn ten days. They allow widow marriage, and practise polygamy; polyandry is unknown. They have no headman and decide social disputes at meetings of the castemen. They send their children to school, keeping boys at school till they are twelve or thirteen and girls till they are married. They are a steady class.

KATARIS.

Ka'ta'ris, or Turners, numbering thirty-six, are found in the subdivisions of Poona, and Junnar. They are like Maratha Kunbis dark, strong, and middle-sized. They profess to be vegetarians and to avoid liquor, but many secretly eat flesh and drink. They dress like Brahmans and as a class are clean, orderly, hardworking, thrifty, and hospitable. They are hereditary carvers and wood-painters, but some of them are moneylenders and rich landholders. They worship all Brahmanic gods and keep the usual Hindu fasts and feasts. They are Smarts, and their family gods are Bhavani, Khandoba, and Mahadev. Their priest is a Deshasth Brahman. Early marriage and polygamy are allowed and practised, polyandry is unknown, and widow marriage is forbidden on pain of loss of caste. On the fifth and twelfth days after the birth of a child the goddess Satvai is worshipped and the child is named on the twelfth. he mother's impurity lasts ten days. The boys are girl with the sacred thread between eight and eleven and married between fifteen and twenty-five. The girls are married between eight and fifteen, and the offer of marriage comes from the boy's parents. On a girl's coming of ago she sits apart for three days and on the fourth is bathed presented with a new robe and bodice, and the caste people are feasted. The burn their dead and mourn ten days. In social matters, they form a united community and settle disputes at their caste councils. They send their children to schools and are ready to take-advantage of any new openings.

KHATRIS.

Khatris, or Weavers, are returned as numbering 460 and as found over the whole district. They say they were originally Kshatriyas who to avoid Being slain by Parashuram were told by the goddess Hinglaj to assume the name of Khatris and to take to weaving. They cannot tell when and whence they came into the district. These are divided into Somvanshis, Surtis, and Suryavanshis, who do not eat together or intermarry. The surnames of the Somyanshais, to whom the following particulars belong, are Chavhan, Gopal, Jhare, Khode, Khosandar, Povar, and Valnekar; people bearing the same surname do not intermarry. Their leading family stocks or gotras are Bharadvaj, Jamadgani, Narad, Parashar, Valmik, and Vashishth; people having the same *gotra* cannot intermarry. The names in common use among men are Balkriskna, Pandu, Ramchandra, and Vithal; and among women Bhima, Lakshmi, Tuka, and Yamuna. They do not differ from Deshasth Brahmans in face, figure, or bearing. The speak Marathi but their home tongue is a mixture of Marathi and Gujarati. Most of them live in houses of the better sort, mud and brick built, with one or two storeys and tiled roofs. Their house goods include metal and earthen vessels,

cots, boxes, blankets, carpets, and bedding. Their staple food is millet, split pulse, vegetables, and a preparation of chillies or tikhal. They eat fish and the flesh of sheep, goats, and fowls, and drink liquor. Both men and women dress like Deccan Brahmans. They are clean, neat, thrifty, sober, and hardworking. They weave robes, waistcloths, and bodices. They sell the robes at £1 4s, to £5 (Rs. 12-50), and waistcloths and pitambars at £1 2s. to £10 (Rs. 11 -100), and earn 16s. to £3 (Rs. 8-30) a month. Besides weaving they string on wire or thread gems and pearls, make fringes, threads for necklaces, tassels, netted work, and hand and waist ornaments. Their women and children help them in their calling. They work from seven to twelve and again from two to 3ix or seven. They worship the usual Brahmanic gods and goddesses and their family goddess is Bhavani of Tuljapur. Their priests are Deshasth Brahmans who officiate at their houses. They keep the regular fasts and feasts and make pilgrimages to Alandi, Benares, Kondanpur, Pandharpur, and Tuljapur. On the fifth day after the birth of a child some worship a grindstone and rolling-pin and others a clay horse with a rider. In front of the horse are placed five millet stems about six inches long wrapped in rags and the whole is worshipped by the midwife and offered sugared milk or *khir* and cakes or telchya. Five to seven dough lamps are placed near it and outside the mother's room on either side of the door are drawn ink or coal figures whose brows are daubed with redpowder. These also are worshipped. On the twelfth day five married women are asked to dine and the child is laid in the cradle and named. Female relations and friends make presents of clothes to the child and they leave with a present of wheat and gram boiled together and packets of betelnut and leaves. They clip a boy's hair when between one and five years old and gird him with the sacred thread before he is ten. They marry their girls before they are eleven and their boys before they are twenty-five. They born their dead, and allow widow marriage and polygamy Bat not polyandry. They hold caste councils and send their boys to school. As a class they are well-to-do.

KOSHTIS.

Koshtis, or Weavers, are returned as numbering 2713 and as found over the whole district except in Maval. They say they were Brahmans who for refusing to give the Jain saint Parasnath a piece of cloth were cursed and told they would become weavers and never prosper. They cannot tell when or whence they came, but say they have been in the district for the last three generations. Their surnames are Avad, Bhandari, Gorpi, Kamble, and Phase. The names in common use among men are Bandoba, Grhanashsham, Jankiram, and Khandoji;

and among women Bhima, Lakshmibai, Radha, and Rai. Their home tongue is Marathi. Their houses are like those of other middle-class Hindus except that they have unusually broad verandas. A weaver's house can be known by the mag or pit for working the pedals, and by pegs, called *dhorje* and *khute*, fixed in front of the house. Their house goods, besides one to three or four hand-looms, include earth and metal cooking vessels. Some look and dress like Marathas and others like high-caste Hindus in Deccan Brahman turbans and shoes; the younger men wrap scarves round their heads. Like the men the women dress like Maratha or Deccan Brahman women in a full robe and bodice, and pass the skirt of the robe back between the feet and tuck it into the waist behind. Their staple food includes millet bread, pulse, chillies, and vegetables, and occasionally rice, fish, and the flesh of sheep, goats, and forris. They are forbidden country or foreign liquor on pain of a fine of 6d. to 2s. 6d. (Re.¼-1¼), but they smoke tobacco and hemp. They weave both cotton and silk robes and bodicecloths. Some act as servants to weavers earning 4s. to 10s. (Rs. 2 - 5) a month. Boys begin to weave about fifteen. They become apprentices to weavers and in two or three years are skilful workmen. The women help the men by disentangling or clearing threads drawn over the frame or baili, by sizing or pajni, by joining the threads sandni, and sorting the threads in the loom popati or vali. A Koshti earns 14*. to £1 (Rs.7-10) a month. Their busy season is from September to June or from Ashvin to Jyeshth. During the rains most of them do little weaving and work in the fields. They suffer from the competition of Europe and Bombay machine-made goods and many of them are in debt. They have credit and borrow to meet birth, marriage, death, and other special expenses at one and a half to two per cent a month. They do not work on full-moons, no-moons, eclipses. Dasara in September-October, or Divali in October-November. They worship the usual Hindu gods and goddesses and their family gods are the goddess Chavandeshvari of Bhalavni in Sholapur, Khandoba, Bahiroba, and the goddess Bhavani of Tuljapur. Their family priest is a Deshasth Brahman who is highly respected. Their spiritual teacher, a Hatkar or Dhangar by caste, lives at Kolhapur. They call him *quru* and he is succeeded by one of his disciples. They keep the ordinary Hindu fasts and feasts, and their chief holiday is the full-moon of the mouth of Paimh or December-January in honour of the goddess Chavandeshvari. On the fifth day after the birth of a childi they place a silver image of. Sotvai on astone slab or pata along with sand, rui calotrospis gigantea leaves, and a lighted stone lamp, worship it with redlead, turmeric, and red powder, and offer it boiled; gram, cooked bread, pulse, and vegetables. Five unmarried women' are feasted in honour of the goddess, and, on the

morning of the seventh day, the slab is removed and the lying-in room cowdunged and the cot washed. For ten days the mother remains impure. If the child is a girl she is named on the twelfth and if a boy on the thirteenth. The child's hair is clipped for the first time on a lucky day when the child is four months to a, are old, and pieces of cocoa-kernel are served. They marry their boys between ten and twenty-five and their girls between five and eleven. Except in the following particulars, their marriage castores are the same as those of Decean Kunbis, Their marriage quardian or devak is the jupane are joiner, a. tool which joins the threads of two pieces of cloth, and the pacrhpallavs or five leaves, of four figs Fions religiosa, gloracrata indica, and infectoria, and of the mango, which they tie to a post in the marriage hall. They marry their children standing in bamboos baskets in front of each other. The detail of the marriage ceremony the giving away of the bride, the kindling of the sacrificial fire, and the bridegroom's theft of one of the girl's family gods, are the same as among Marathi Kunbis. On the second day of the marriage the cowdung a spot of ground and lay a metal plate on it. The platei covered with a second metal plate, and over the second plate is set water-pot full of cold water and within the neck of the pot are five betel leaves and a cocoanut. Into the pot comes the goddess Chavaudeshvari and round her are arranged thirteen betel packet each packet with thirteen be tel leaves and an equal number of nuts and one copper coin. The packets are set aside fir the following men a distinction: The Ramble who spreads a blanket before the goddess the Ghats who sits fast or ghat in front of the goddess, the Talkar or metal cup boater, the Divats or torch-holder, the Bhandari or offerer of turmeric powder or bhandar, the Chavre or fly-searer, the Dhole or drum-beater, the *Dhavalshankhe* or conch-blower, the *Upre*. or incense-waver, the *Kitashe* or pot-setter, the *Jhade* or sweeper, the Tatpurash who lays out the two plates, and the Gupta or invisible. Each of these thirteen mankharis or honourables, who is present, takes a packet and the packets of those who have not come are distributed among the guests. In the evening the boy girl ride on horseback to Maruti's temple and from it are taken to the boy's house. Before entering the Louse curds and rice are waved round their heads and thrown away. When they enter a house the girl is given an old bodice with rice, wheat, and grains of pulse. She walks dropping the grain as far as the house gods, and the boy's brother follows picking it up. Near the gods cleven gram cakes or *puran-polis* are piled one on the other, and near the cakes are two brass water-pots containing molasses and water one of which is a two-anna- silver piece. 'The girl is asked to lift the water-pot in which the coin has been dropped. If she succeeds is well, but failure is considered ill-omened. Next day the

marriage ceremony ends with a feast. Konhtia allow child marriage and polygamy but forbid widow marriage. When a girl comes of ago she is seated for four days by herself. On the, morning of the fifth day she *is* bathed, dressed, in a new robe and bodice, and for lap is filled with live kinds of Trent and with betel packets. A feast is given to near relations and the girl's parents present the boy and girl with new clothes. They either bury or burn the dead. The dead if a man or a widow is wrapt in s white sheet, and if a marriage woman in a green sheet. The body is laid on the bier and carried to the burning ground. The ether death ceremonies do not differ from those observed by Manttha Kunbia. They have no headman and settle social disputes at meetings of the castemen. They sand their boys to school for a short time. They do not take to new pursuits, and are said to be a falling people.

KUMBHARS

Kumbha'rs, or Potters, are returned as numbering 7789 and as found other the whole district. They are divided into Marathas is and Pardeshis who do not eat together or intermarry. The surnames of the Maratha Kumbhars are Chavgule, Mheire, Sasvadkar, Urlekar, and Vagule.; families bearing the same surname do not intermarry. The names in common use among the men are Dagdu, Mhadu, Naru, Ruoja, and Sambhu; and among the women Dagdi, Janki, Kondai, Rai, and Vithai. They are Marathas and look and speak like Marathi Kunbis. Their houses are the same as those of Marathas and can be known by pieces of broken jars,, heaps of ashes, and the wheel. Their staple food is millet but they eat fish, and flesh and drink liquor. The men wear the Maratha turban, waistcloth, and jacket; and the women the usual bodice and the full robe with the skirt drawn back between the feet. They are hardworking guiet and well-behaved. They make watervessels called gha deras and madkis, flower-pots called kundia, great grain jars, called ranians, and children's toys. These articles sell at 7 d. to 1s. (1/12-8 as.). They make tiles and sell them at to 10s. (Rs.3-5), and bricks at 10s. to 18s, (Rs.5-9) the thousand. They play on a tambourine at a Maratha's house on the thirteenth day after a death and at a Brahman's house after a marriage, when they are asked to a feast and are given 6d. to it: (Rs.¼ -2). In religion they are the same as Marathas and their priests are Desnasth Brahmans. On the morning of the fifth day after the birth of a child, a twig of the three-cornered prickly-pear or *nivdung* is laid near each of the feet of the mother's cot. and in the evening near the mother's cot is placed a grind stono or pata, and over it are laid the prickly pear or nivdung, some river sand or valu, some river moss or lavhala, and some poniegrmiato or dalimb

flowers, and the whole is worshipped by the mid wife. A goat is killed, dressed, and eaten by the people of the house and guests who are invited for the occasion. On the outer walls of the house near the front door some of the women trace seven black lines and Worship them with flowers, red and scented powders, and rice grains, and offer them wet gram and mutton. This ceremony costs 6n. to £1 (Rs. 3-10). The mother is considered unclean for eleven days. In the afternoon of the twelfth five pebbles are pointed red, laid in the street in front of the house, and worshipped by the mother with sandal, rice grains, red and scented powders, and flowers, frankincense and camphor are burnt, and wheat cakes, cooked rice and curds are offered at a cost of Is. to 2s. (Re. 1/2 -1). From a month to six months later the goddess Ran-Satvai is worshipped in waste or bush land, three to twelve miles from the house. Five pebbles are painted with redlead, laid in a line, and worshipped Seven of each of the following articles are offered, dates, cocoanuts, betelnuts, almonds, turmeric roots, and plantains. A goat is killed before the five pebbles, dressed, cooked, and offered along with cooked rice wheat cakes and vegetables. They then dine and return home the ceremony costing 8s. to 16s. (Rs. 4-8). If the child is under a vow its hair is clipped in front of the Ran-goddess; if the child is not the subject of a vow it is shaved at home. The child whether it is a boy or a girl, is seated on the knee of its maternal uncle, and a few of its hairs are clipped by the uncle himself, and the head is shaved by a barber who is given 3/4 d. (1/2 a.) and a cocoanut. Sometimes a goat is killed and a feast is held costing 4s. to 16s. (Rs. 2-8). They marry their girls before they are sixteen and their boys up to twenty-five. The boy's father has to give the girl's fat her £1 to £10 (Rs. 10 -100). When £1 to £3 (Rs. 10 - 30) are given the girl's father is expected to apply it to the girl's marriage expense only, and when £3 to £10 (Rs. 30 - 100) are given he is expected to pay what is spent both at the boy's and at the girl's houses. Their asking or magni is the same as the Maratha asking and costs them 6s. to £1 (Rs. 3-10). They rub the boy and girl with turmeric three to five days before the marriage. Their wedding guardian or devak is a wristlet of the creeping plant called mareta which grows by the sea side, the potter's wooden patter or phal, and a hoe or kudal. They make an earthen altar at the girl's and pile twenty earthen pots and make a marriage porch both at the boy's and at the girl's. They marry their children standing in bamboo baskets spread with wheat. After the marriage comes the kanyadan or girlgiving, when the girl's father puts a four-anna-piece on the girl's outstretched hands and the boy's father an eight anna piece, and the girl's mother pours water over them. The girl drops the contents of her hands into the boy's hands and he lets them fall into a metal plate. A cotton thread is passed ten times round the necks of both the boy and

the girl. It is cut into two equal parts and tied to the right wrists of the boy and the girl. The sacrificial fire is kindled on the altar and fed with butter. The hems of both the boy's and the girl's clothes are knotted together, and after they have bowed to the house gods the kuots are untied. The guests retire with betel packets and the day's proceedings are over. On the morning of the second day, the boy and girl bathe and are seated near each other, and the boy keeps standing in a water tub in his wet clothes until a new waistcloth is given him. In the evening the boy's parents present the girl with ornaments, and the girl's mother places on a high wooden stool a copper or brass plate, a wooden rolling-pin or latne, and a box with tooth-powder. She lifts the stool over the head of the girl father and mother and it becomes their property. A procession is formed and the boy walks with his bride to her new home accompanied by kinspeople and friends and music. The marriage festivities end with a feast which costs the boy's father about £5 (Rs. 50) and the girl's father about £3 (Rs. 30). The ceremony at a girl's coming of age is the same as among Marathas and coats 10s.to £1 (Rs. 5-10). They generally burn their dead, mourn them ten days, and feast the caste on sweet cakes. They allow widow marriage and practise polygamy but not polyandry. They have a headman or mhetrya who punishes breaches of caste rules by fines. The amount of the fine which seldom exceeds 2a. (Re. 1) is spent on clarified butter served at a feast in any castefellow's house. They do not send their boys to school and are poor.

LAKHERIS.

Lakheris, or Lac Bracelet Makers, are returned as numbering seventynine and as found only in Poona city. Their former home seems to have been in Marwar and they believe they came to Poona during the time of the Peshwas. They have no subdivisions and no surnames, and look and speak like Marwar Vanis. They live in hired houses with brick and mud walls and tiled roofs, and their staple food is millet and vegetables. They eat rice and wheat bread once a week, and are not put out of caste if they indulge in a glass of liquor or eat a dish of mutton or fish. They dress like Marwar Vanis and prepare lac bracelets for wholesale dealers by whom they are paid 34 d. (1/2 a.) the hundred. They do not overlay glass bangles with lac. Some of them make bracelets on their own account and sell them at 6d, to 10 ½d. (4-7 as.) the hundred. Their women and their children after the age of fifteen help in the work. They are Smarts, and have house images of Balaji, Bhavani, Ganpati, and Ram. They have nothing like Satvai worship on the fifth day after the birth of a child, and they name their children on any day between the ninth and the thirteenth. There is no

feeling about ceremonial impurity and they touch the mother and child at any time after birth. They marry their children at any age up to twenty or twenty-five, but a girl is generally married at or before she is sixteen and a boy before he is twenty-four. They have no rite corresponding to the installation of the marriage guardian or devak; they say if they have any guardian or devak it is the house image of the god Ganpati. Among them the asking or *magni* comes either from the boy's or the girl's house. When a bridegroom goes to the bride's to be married the bride's mother waves a cocoanut round his head and dashes it on the ground. At the marriage time, the boy and girl are seated on carpets in a line, the hems of their garments are tied together, and they hold each other's hands. The priest kindles the sacrificial fire in front of them, repeats marriage verses, and at the end throws grains of rice over their heads, and they are husband and wife. Next day the bride's lap is filled with fruit and she along with the bridegroom is taken to the boy's house where a feast on the following day ends the ceremony. The Lakheris burn their dead and mourn twelve days. On the third day they go to the burning ground, remove the ashes, and place cooked rice and curds on the spot for the crows to eat. On the tenth day they again go to the burning ground and offer ten rice balls. On the twelfth day they place twelve earthen jars filled with water on the threshold of the front door of the house, worship them as they worship the house gods and cast them away. The death ceremonies end with a feast on the thirteenth day when the chief mourner is presented with a now turban either by relations or castefellows. They have no headman, and they settle social disputes at meetings of the castemen. They send their boys to school for a short time. They complain that of late years their craft has fallen owing to the cheapness of glass bangles. Formerly when glass bangles were sold at 1 $\frac{1}{2}$ d, to 2 $\frac{1}{4}$. (1-1 $\frac{1}{2}$ as.) each lac bracelets were much sought after. Now no one cares to buy lac bracelets and many Lakheris live chiefly by labour.

LOHARS

Lohars, or Blacksmiths, are returned as numbering 258 and as found all over the district. They are divided into Maratha and Panchal Lohars who neither eat together nor intermarry. The Panchal Lohars do not differ from the other Panchals of whom an account is given under Jingars. The Maratha Lohars say that they came to the district during the Peshwa's supremacy from Ahmadnagar, Bombay, Khandesh, and Sholapur. Their surnames are Bhadke, Chavan, Gavli, Kamble, Malvadkar, Navngire, and Suryavanshi. Persons bearing the same surname do not intermarry. The names in common use among men

are Lakshman, Narayan, Narsu, Ramkusha, Vishnu and Vithn; and among women Kashi, Lakshumi, Radha, and Rama. They look like Marathas, being dark, strong and regular-featured. Their home tongue is Marathi. The men wear the top-knot and the moustache and sometimes whiskers but never the beard. The women tie the hair in a knot behind, and mark their brow with redpowder. They live in middleclass houses with walls of mud and tiled roofs which they hire at 1s. to 2s. (Re. ½-1) a month. Their goods include earthen vessels and they have neither cattle nor servants. Their working tools are the *hatodi* or hammer worth 6d. 10 4s. (Rs. ¼-2), the sandsi pincers worth 6d. to1s. (as.4-8), the *pogar* or carving tool worth *h anna*, the *kanas* or tile 3d. to 1s. (as.2-8), the airan or anvil worth 4s, to 10s. (Rs. 2-5), the bellows or bhata worth 1s, to 6s. (EF. 1-3), the ghan or sledgehammer worth 2s. to 4s. (Rs. 1-2), and the shingada or anvil worth 10s. to £2 (Rs. 5-20). Their staple food is millet or wheat bread, split pulse, and vegetable. They also eat rice and occasionally fish and flesh. They drink to excess. Both men and women dress like Marathas; the men in a three-cornered turban, a waistcloth, coat, waistcoat, shouldercloth and shoes; and the women in a full Maratha robe and bodice, the skirt of the robe being passed back between the feet and tucked in at the waist behind. They rub their brows with redpowder but do not wear false hair or deck their head with flowers. They are hardworking, but thriftless, quarrelsome, dirty, and drunken. They work as blacksmiths, make and mend the iron work of ploughs and carts, make brass-bound boxes, and cups and saucers, plates, cement boxes, and looking-glass frames. They work from morning to evening and are not helped by their women. Their boys begin to learn at twelve and are expert workers at twenty. When learning the craft they blow the bellows and handle such tools as they can manage to work and are paid $1\frac{1}{2}d$.to 6d. (57. (1-4 as.) a day. They worship the ordinary Hindu gods and have house images of Klumdoba, Bhavani, Babiroba, Mahadev, and Ganpati. Their priests are the ordinary Deshasth Brahmans, to whom they show great respect and whom they call to officiate at their houses during births, marriages, and deaths. They keep the usual Brahmanic fasts and feasts, and go on pilgrimage to Jejuri, Kondanpur, Alandi, and Pandharpur. Except in the following particulars their customs do not differ from those of Marathas. Their quardian or devak is the hammer or hatodi. During the marriage ceremony the boy and girl are made to stand face to face in bamboo baskets. When a girl comes of age she is fed on sweet dishes for fifteen days and on the sixteenth her lap is filled with wheat and plantains and betel packets. When a Maratha Lobar is on the point of death he is seated on a blanket leaning against a wall, and is supported on both sides by near relations and the name of Ram is

repeated in his ear. When he is dead the body is laid on a bamboo bier and carried either to burning or to burial. They have no head-man and settle social disputes at mass meetings of adult castemen. They send their boys to school for a short time. They suffer from the competition of European hardware. Some have taken to day labour and to field work.

LONARIS.

Lona'ris, or Lime-burners, are returned as numbering 885 and as found over the whole district. They say they have been in the district for more than a hundred years. They have no subdivisions. Their surnames are Dadare, Dhavekar, Dhone, and Gite. People bearing the same surname do not intermarry. They say they are Marathas, and eat and marry with them, and do not differ from them in appearance, language, dwelling, food, or dress. They are cement-makers, husbandmen, and labourers. They buy lime nodules from Hadapsar, Muhammadvadi, Phursangi, and Vadki at 1s. 6d. to 9,8. (Re. 3/4-1) a cart. They burn the nodules mixing them with charcoal and cowdung cakes in a circular brick kiln which takes three to six days to burn. Their boys do not begin to help them till they are sixteen, as the work requires strength. Their religion is the same as that of the Marathas and their priests are Deshasth Brahmans. Except that at the time of marriage the boy and girl are made to stand in bamboo baskets or shiptara, their customs are the same as Maratha customs. Their headman, who is called *patil*, settles social disputes at meetings of the castemen and with their consent. They send their boys to school. They complain that their calling is failing from the competition of well-to-do Parsis and Brahmans and of Mhars and Mangs.

NIRALIS.

Niralis, or Dyers, are returned as numbering 162 and as found *NIRALIS.* in Khed, Poona, and Junnar. They say they came into the district from Ahmadnagar seventy-five or a hundred years ago. They are divided into Chilivant or Lingayat Niralis and Maratha Niralis, who do not eat together or intermarry. The surnames of the Maratha Niralis, to whom the following particulars belong, are Ghongde, Kalaskar, Mamdekar, Mhasalkar, Misal, Nakil, and Pataskar. The names in common use among men are Balaji, Bapuji, Bhiva, Madhav, Maruti and Vithal; and among women Bhima, Radha, Rakma, Rama, Renuka, and Vithal. They are about the middle height and are strongly made, and shave the face and the head except the top-knot. Their home speech is Marathi. Most of them live in houses of the better sort,

two or more storeys high, with walls of brick and tiled roofs. Their houses contain metal cooking vessels, boxes, cradles, cots, blankets, and bedding, and earthen jars for preparing colours. They sometimes keep a cow, but none keep servants either to help in their calling or for house work. They are fond of pungent dishes. They eat fish and the flesh of sheep, goats, hares, deer, and domestic fowls, and drink both country and foreign liquor. They smoke hemp flowers and tobacco and chew betelnut and leaves. Their staple food is millet bread, split pulse, vegetables and fish curry, and every now and then rice. They give caste feasts on marriages and deaths, when sugar cakes and a preparation of molasses or *gulavni* are made. They dress either like Marathas or Brahmans. The men wear a top-knot and moustache, but not whiskers or a beard. The women dress in a full long robe and bodice, passing the skirt of the robe between the feet and tucking it behind and drawing the upper end over the head. Their ornaments are like Maratha ornaments and are not worth more than £10 (Rs. 100). They are neat and clean, hardworking, honest, hospitable, and wellbehaved. In Poona ail are dyers though in other districts most of them weave. Their women help by bringing water, pounding colours, and dyeing cloth. Their boys begin to work at sixteen, and are skilled workers at twenty, when they earn 6d. to 9d. (4-6 as.) a day. They buy dried safflower or kusumba at three to three and a half pounds the rupee, indigo or nil at two and a half to three pounds, sappan-wood or patang at five to six pounds, myrobalans or hirdas at sixteen pounds, alum or turti at seven to eight pounds, green vitriol or hirakas at four to five pounds, country alkali or sajikhar at sixteen pounds, and lime or chuna at sixteen pounds. They dye clothes dark-red or kharvi, black or kala, rose or gulabi, onion colour or pyaji, a reddish colour or abashai, red or kusumbi, blush or motiya, yellow or pivala, and green or hirva. They dye both fleeting or hatha and fast or paka colours. They charge 2s. (Re.1) for dyeing four pounds of thread a fading black and three pounds a fast black. They also dye yarns green, red, and yellow charging 2s. (Re. 1) for three to six pounds weight. To dye a turban rose they charge 2s. to 4s. (Rs. 1 -2), red 2s. to 10s. (Rs. 1-5), onion-coloured 6 d. to 2s. (Re. £-1), reddish 1s.to 8s. (Rs. $\frac{1}{2}$ - 4), a speckled red or shidkav 1 $\frac{1}{2}d$. (1 a.), green 6d. to 2s. (Re. $\frac{1}{4}$ -1), and yellow 6d. to 2s. (Re. $\frac{1}{4}$ -1). To dye a robe rose they charge 6d. (4 as.), red 2s. (Re. 1), onion green yellow red white and reddish 6d. to 1s. (as. 4-8), and a speckled red 6d. to 1s. 3d. (4-10) as.). They make about 3d. to 6d. (2-4 as.) on every 2s. (Re.1) worth of colour they use. Their busy times are the Hindu festivals of Shimga in March, Dasara in October, and Divali in November; and the movable Musalman feast of *Moharram*. They worship the usual Brahmanic gods and goddesses, and their family deities are Khandoba of Jejuri and

Bhavani of Tuljapur. Their priests are Deshasth Brahmans, who officiate at their births marriages and deaths. They make pilgrimages to Alandi, Jejuri, Pandharpur Tuljapur, and Benares. They believe in sorcery, witchcraft, sooth-saying, and lucky and unlucky days, and consult oracles. On the fifth day after the birth of a child they worship a grindstone placing on it five lemons, five pomegranate buds, and a lighted dough lamp. On the tenth day the mother is purified and on the eleventh the child is cradled and named, when sweetmeats are served among friends and kinspeople. They marry their girls before they come of age, and their boys before they are twenty-five. They allow child and widow marriage and polygamy; polyandry is unknown. When a Nirali dies his body' is covered with a white sheet and flowers are sprinkled over it. They do not cover the bodies of married women with a shroud but dress them in a yellow robe, and sprinkle turmeric and flowers over them. Pounded betel is laid in the dead mouth, and the body is carried to the burning ground, where it is either burnt or buried. They have a caste council and settle social disputes at meetings of the castemen. They send their boys to school. They are a poor people, and com-plain that their calling suffers from the competition of European dyes. Since the famine of 1876 and 1877 they say many people-wear white instead of dyed cloth, or dye their turbans seldomer than before.

OTARIS.

Ota'ris, or Casters, are returned as numbering 109. and as found in Haveli, Bhimthadi, Maval, Khed, Purandhar, and the city of Poona. They say they are Kshatriyas and that their origin is given in the Padmapuran. They came into the district about two hundred years ago from Satara. They have no divisions. Their surnames are Ahir, Bedre, Dhangar, Gotpagar, Magarghat, and Mhadik. Marriage between people with the same surname is forbidden. The names in common use among men are Bhagaji, Chingapa, Eknath, Krishna, Ramji and Trimak; and among women Chandrabhaga, Kondabai, Muktabai, and Umabai. Otaris look like cultivating Marathas and speak Marathi. They live in ordinary middle-class houses with mud walls and tiled roofs, paying a monthly rent of 6d. to 2s. (Re. 1/4-1). Their staple food is millet bread, pulse, and vegetables including chillies of which they are very fond. They occasionally eat rice and fish, and the flesh of sheep, goats, hares, deer, and domestic fowls, and on Dasara Day in October they offer a goat to Ambabai of Tuljapur. It is the cost not religious scruples that prevents them regularly using animal food. They drink both country and foreign liquor, smoke tobacco and hemp, and some take opium. Liquor-drinking and smoking are said to be on the

increase. The men wear a Maratha turban, waistcoat, coat, waistcloth, and shouldercloth, and mark their brow with sandal. The women wear a bodice and the full robe with the skirt passed back between the feet. They rub their brows with redpowder, but do not use false hair or deck their hair with flowers. Their ornaments are either of silver or of queensmetal. They wear the nosering called *nath*, the bracelets called got, and the anklets called jodvis. They are hardworking but drunken, and their chief calling is the making of the gueensmetal noserings or jodvis which are generally worn by Maratha, Burud, Mhar, and other low-class or poor women. A few of them make molten images of Hindu gods. Their women help them in their calling, preparing earthen moulds Or saches, blowing the bellows, and hawking the toe-rings. Boys begin to help at twelve or fourteen, and are expert workers at eighteen or twenty. The men hawk the toe-rings or jodvis from door to door and from village to village, or squat about the roadside, as they cannot afford to open regular shops. Their work is not constant, and they have no regular hours. They rest on full-moons and no-moons. They buy the queensmetal from coppersmiths or Kasars at the rate of 6d. to $7\frac{1}{2}d$. the pound (8-10 as. the sher) and sell them to wholesale dealers at 1s. to 1 ½s. the pound (Rs. 1 to 1 ¼ the sher). The retail price of toe-rings or jodvis is 1 $\frac{1}{2}d$. to 3d, (1-2 as.) a pair for a girl and 3d. to 6d. (2-4 as.) for a woman. They buy from Gujarat Vanis broken or modi brass, borax or savagi, charcoal, pewter or jast, and *kathil* or tin. The rates are, borax. $10\frac{1}{2}d$. to 1s. $1\frac{1}{2}d$. (7-9 as.) the pound, charcoal twenty to twenty-five pounds the rupee, pewter four to six pounds the rupee, tin 2s. (Re. 1) a pound, and old brass $10\frac{1}{2}d$. to 1s. (7-8 as.) a pound. They keep the mixture which they use secret. The details are said to be a pound of old brass, one-eighth of a pound of pewter, and two tolas of tin. Their tools are a hammer or hatodi worth 1 $\frac{1}{2}d$. to 3d. (1-2 as.), pincers or sandsi worth 3d to 1s. 3d. (2-10 as.), a file or karas 9d. to 1s. 6d. (6-12 as), a rod or danda worth $\frac{3}{4}d$. ($\frac{1}{2}a$.), and a file or *reti* worth about 1s. (8 as.). They carry about the toe-rings or jodvis for sale hung on an iron ring or leather band which holds about ninety-six rings. They are said to suffer from the competition of Marathas and goldsmiths who have no gold or silver work. They consider themselves higher than Shudras, and say they eat only from Brahmans, Lingayats, and Gujarat Vanis. They cannot tell whether they are Shaivs or Vaishnavs. Their family goddess is Kalkadevi of Paithan. They have house images and worship Bahiroba, Bhairji, Bhavani, Dhanai, Janai, Khandoba, Maruti, and Nagji. Their family priests are the Ordinary Deshasth Brahmans to whom they pay great respect. They make pilgrimages to Alandi, Jejuri, and Kondanpur. Their fasts and feasts are *Makarsankrant* in December-January, Shivratra in January-February, Holi in February-March,

Gudipadva in March-April, Dasara in September-October, Divali in October-November, and the lunar elevenths or ekadashis in June-July and October-November. When a child is born its navel cord is cut by the midwife who is paid 9d, to 2.s. (Re. 34 - 1). The mother and child are bathed and the navel cord is laid in an earthen jar, turmeric and redpowder are sprinkled over it, and the jar is buried somewhere in the house. For the first two days the child is fed on honey and castor oil and the mother on rice and butter. On the fifth red lines are traced on a wall and under the lines is laid a stone slalb or pata. On the slab are placed the knife with which the child's navel cord was cut and rice pulse and cakes are offered. On the evening of the twelfth any the child is named by the women of the house, and five to seven pebbles are laid in a row and worshipped by the mother The child is brought before the pebbles as the representatives of the goddess Satvai and the mother begs them to grant the child a long life. The naming ends by offeing the goddess a dish of cakes or *puran-polis*. The hair-clipping take place between the second and the twelfth year, when a dinner of cakes or puran-polis is given. Betrothing or sakharpuda the gift of a sugar-cake takes place a couple of weeks to a couple of year before marriage, when the girl is presented with a robe and bodice-The boy and the girl are rubbed with turmeric at their houses two or three days before the marriage and a robe or patal and a green-coloured bodice are presented to the girl. On the following day the marriage gods or devkaryas are installed, when a circular bamboo basket or durdi and a winnowing fan are worshipped near the house gods. On the evening of the marriage day, the boy is seated on horseback, and, accompanied by kinspeople and music, takes his seat at the temple of Maruti in the girl's village. His brother goes on to the girl's house and reports the bridegroom's arrival at the temple. The brother is given a turban, and the men and women of the bride's house, with a suit of clothes for the boy, go with him to Maruti's temple. The boy is presented with the clothes, generally a turban and sash, and is carried in procession to the girl's house. Before he enters the marriage hall, an elderly woman waves a lemon or a cocoanut round his head and dashes it on the ground. The boy is taken into the marriage ball and set facing the girl, a cloth is held between them, the Brahman priest repeats verses and throws rice over their heads, and they are husband and wife. They are seated on the altar and the sacrificial fire is lit and fed with butter and parched grain. A feast closes the day. On the following day the boy goes to his house on horseback with his bride in procession accompanied by kinspeople and music and a second feast ends the marriage. When an Otari is on the point of death, Ganges Water or the five cow-gifts are laid in his mouth and he is told to repeat Ram's name. In the dying man's name money is given in charity to Brahman

and other beggars. When he is dead hot water is poured on the body, and he is laid on a bier and carried to the burning ground on the shoulders of four men. The chief mourner walks in front of the bier holding a fire-pot. About half-way to the burning ground the bier is set on the ground, a Copper coin is laid at the roadside and covered with pebbles, and the bearers changing places carry the body to the burning ground, dip the bier into a river or pond, and place the body on the pile. The chief mourner walks thrice round the pile carrying an earthen water-pot full of water, dashes it on the ground, beats his mouth, and sets fire to the pile. When the body is burnt, the mourners bathe and go borne. On the third day they go to the burning ground, taking the five cow-gifts, three earthen jars and a cake, and, throwing the ashes into the river or pond, put the bones in an earthen jar and bury them. After ten days' mourning the bones are allowed to remain buried, or they are thrown into water, or they are taken and buried or Benares, Nasik, or some other sacred spot. The chief mourner sprinkles the five cow-gifts on the spot where me deceased was burnt, and setting three jars filled with water and bread for the deceased to eat, returns home. They mourn ten days, and feast the caste on the twelfth or thirteenth. One of the nearest relations presents the chief mourner with a new turban. He puts on the turban, is taken to the village temple, bows to the god, and returns home. The Otaris are bound together as a body, and have a headman called *patil* who settles social disputes in consultation with the members of the caste. They do not send their boys to school nor take to new pursuits. As a class they are poor.

PATHARVATS.

Patharvats, or Masons, are returned as numbering 309 and as found all over the district. They are divided into Maratha, Kamathi, and Telangi Patharvats who do not eat together or intermarry. The surnames of the Marathas are Ambekar, Barnaik, Chaphe, Hinge, Holekar, Khage, Lugad, Eandeve, and Sape; and families bearing the same surnames do not intermarry. The names in common use among men are Bhau, Shivba, Tukaram, and Vennunath; and among women Chandrabhaga, Lakshmi, Saka, and Savitri. They are dark middle-sized and strong. The men wear the top-knot moustache and whiskers, but not the beard. They speak Marathi and live in houses with mud and brick walls and tiled roofs. They eat fish and flesh and drink liquor, but not at their caste-feasts. Both men and women dress like Marathas. They are clean, hardworking, frugal, orderly, and hospitable. They are stone-masons and carvers and make excellent images of gods and of animals, hand-mills, grindstones, and rolling pins Their hand-mills cost

1s. to 2s. (Re. $\frac{1}{2}$ -1), grindstones 1 $\frac{1}{2}d$. to 4 $\frac{1}{2}d$. (1-3 aw.), rolling pins 3/8d. to $\frac{1}{2}d$. ($\frac{1}{4}$ - $\frac{1}{2}a$.), and cups called *kundyas* or *dagadyds* $\frac{1}{2}d$. to 3d. (1-2 as.). As foremen or mestris they draw £1 10s. to £2 (Rs. 15 -20) a month, and as day-workers 6d. to 1s. (4-8 as.) a day. Their women do not help in their work, but boys of fifteen to twenty earn 14s. to 16s. (Rs. 7-8) a month. They worship the usual Brahmanic gods and goddesses, and their family gods are Khandoba of Jejuri and Kevis of Tuljapur and Khondan- par. Their priests either belong to their own caste or are Deshasth Brahmans. They make pilgrimages to Alandi, Benares, Jejuri, and Pandharpur, and their fasts and feasts are the same as those of Maratha Kunbis. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. They worship the goddess Satvai on the fifth day after a child is born, and name the child on the twelfth, the name being given by the paternal aunt. Before the child is two years old, it is laid on its maternal uncle's knee and its hair is clipped. They gird their boys with the sacred thread at the time of marriage, and marry their girls before they are eleven and their boys before they are fifteen. Except that during the ceremony the boy and the girl are each made to stand in a bamboo basket their marriage does not differ from a Maratha marriage. They allow widow marriage, but never celebrate them except at night and in lonely places. The man and woman are sented in a line on two high wooden stools, garlands are thrown round their necks, and red and turmeric powder are rubbed on their brows. The hems of their garments are tied together and grains of rice are thrown over their heads, and they are married. They are left together for the night and after a bath return to the husband's house. They burn their dead, hold caste meetings, and are a steady class.

RAULS.

Rauls are returned as numbering 377 and as found in Haveli, Bhimthadi, Maval, Junnar, Khed, Indapur, Sirur Purandhar, and Poona city and cantonment. They do not know when and from where they came into the district, but believe they were driven about two hundred years ago by a famine from Mohol lin Sholapur and Sasvad. They are divided into Rauls, Gosavis, and Bastards or Akarmases, who do not eat together or intermarry. Their surnames are Chavan, Chhatrabhuj, Gadade, Lakhe, Povar, and Vaghulker; and persons of the same surname can eat together but not intermarry. The names in common use among men are Bahirunath, Gopalnath, and Vishvanath; and among women Bhagirthi, Ganga, and Parvati. Except that they all end in *nath* the names both of men and of women are the same as those of cultivating Marathas. They look and speak like Marathas. Their

houses are like ordinary middle-class Hindu houses with walls of unburnt bricks and tiled roofs. Their rates and practice about food do not differ from the rules and practice of cultivating Marathas. They give dinners on the anniversaries or mind-days of their deceased ancestors, on *Nag-panchmi* in August, and on *Dasara* in October. They have of late taken to drinking especially those in the city of Poona. Except a few Gosavi Rauls the men all wear the top-knot as well as the moustache and whiskers, and a few wear beards. The women tie their hair in a knot behind the head and rub redpowder on their brows; they do not wear false hair or deck their hair with, flowers. As the followers or panthis of Gorakhnath they ought to wear ochre-coloured clothes, but both men and women dress almost like Marathas. Except that a few of the men wear brass or horn rings in their ears, the men's and women's ornaments are like those of Marathas. The men wear the earrings called bhikbalis, the armlet called hade, finger-rings or angthias, and a waistchain or kaddora; and the women wear in the ears bugdyas and balias, in the nose the nath, on the neck the sari, thusi, vajratik, and putli or coin necklace, and on the feet toe-rings or jovdis. They are hardworking hospitable orderly and dirty. They are dealers in grain and sellers of gunny bags, small tin boxes, and betelnut-cutters. They weave strips of coarse cloth and cot and trouser tape. Those who have turned Gosavis play and beg, weaving as they beg from door to door. Rauls also work in Sali's houses as weavers, some are messengers in Government offices, and others are husbandmen and day labourers. Though not skilful weavers they make 6d. to $7\frac{1}{2}d$. (4-5 as.) a day. As husbandmen also they are wanting in skill. Their women help in weeding and sowing. They hold themselves higher than any caste except Gujarat Vanis, Lingayats, and Brahmans. Still they eat from the hands of Marathas and dine in their company, and are considered equal to or lower than Marathas. They are religions and worship Mahadev, Mahadev's trident or trishul, the. ling, the dry gourd or patar, and silver taks or masks of Bahiroba, Devi, and Khandoba. They have house images of Bahiroba, Bhavani of Tuljapur and Chaturshingi, Gorakhnath, Khandoba, and Machhandranath, and of the Nath of Sonari in Sholapur. They had formerly priests of their own taste, but they now employ ordinary Deshasth Brahmans at their marriages, births, and deaths. They go on pilgrimage to Pandharpur, Tuljapur, and Parli-vaijanath in the Nizam's country. They fast on Maha-shivratra in February, Ram-navmi in April, Ashadhi ekadashis or July lunar elevenths, on Shravan or August Mondays, on Gokulashtami in August, and on Kartiki ekadashis or November elevenths. Their holidays are *Holi in* March, *Gudi-padva* in April, *Nag-panchmi in* August, Ganesh-chaturthi in September, Dasara in October, and Divali in November Their spiritual teachers or gurus are Bmuabaya of Parah

in the Nizam's country and Bhivnathsagar of Wai in Satara, Who are succeeded by their sons or disciples. Except that they worship five dough lamps in honour of Paehvi on the fifth day the ceremonies during the first five days after a birth are the same an those of Maratha Kunbis. For seven days they consider the mother unclean. When after a bath she has become pure, turmeric figures are drawn on the wall of the lying-in room and worshipped by the mother and sweet cakes or *puran-polis* are offered. On the twelfth day, the mother, taking the child in her arms, goes out of the house near the road, lays seven pebbles in a line and worships them with red scented and turmeric powder, lays flowers on them, burans frankincense before them, and offers them sweet cakes or *puranpolis*. In the evening the married women of the caste meet at the mother's house, and present the child with a cap and the mother with plantains and betel packets. The child is laid in the cradle and given a name chosen by the Brahman priest. Sugar and betel packets are served and the guests withdraw. The *javal* or hair-cutting comes when the child is two years old. They marry their girls between six and twelve and their boys between twelve and twenty-four. Betrothal takes place a fortnight to a couple of years before marriage, when the girl is presented with a packet of sugar and a robe and bodice. Two to four days before the wedding, the boy is rubbed with turmeric at his house, and what remains is sent to the girl with a green robe and bodice and a chaplet of flowers or mundaylis. Her body is rubbed with turmeric, she is dressed in the robe and bodice, and the flower chaplet is bound on her brow. Next day a goat is killed and a feast held in honour of the family guardian or devak, which consists of mango, rui Calotropis gigantea, and saundad Prosopis spicegera leaves. On the marriage day the boy is dressed in new clothes, seated on horseback, and carried in procession to Maruti's temple and is there presented with a new turban and sash. From the temple he is taken to the girl's house and a marriage ornament is bound to his brow. At the girl's house before he dismounts a married woman waves a piece of bread round his face and throws it on one side. The boy is led into the house by the girl's father or some other near relation of the girl's and is made to stand on a low wooden stool in front of the girl, a cloth is held between them, and while Brahmans repeat the marriage verses or mangalashtaks, the musicians play, and, when priests have finished the wedding verses, grains of rice are thrown over the boy's and girl's heads, the cloth is pulled on one side, and the boy and girl are husband and wife. They are seated near each other on the altar, the sacrificial fire is lit, the hems, of their gaments are knotted together, and they bow before the house goda. A feast is held in the evening. Next day, after the exchange of clothes between the two houses and the handing over of

the girl to the boy's parents with prayers to treat the girl with kindness, the boy walks in procession with the girl to his house, and a caste feast ends the marriage. When a girl comes of age she is kept by herself for three days. On the morning of the fourth day she is bathed and presented with a robe and bodice, and her lap is filled with wheat and a cocoanut. The boy is presented with a turban and a shouldercloth or shela, and the ceremony ends with a feast to near relations. When a Raul is on the point of death a few drops of Ganges water and cow's urine are poured into his mouth. When he dies he is seated in a bamboo frame or makhar and carried on the shoulders of four men, with a Raul blowing a conch-shell in front. At the burial ground an arched three-cornered hole is dug four feet in diameter and four feet deep and the body is seated in the hole with its face to the east. The chief mourner pours a little water from a conch-shell into its mouth. Salt is heaped over the body and the grave is filled with earth and a mound raised over it. An elder stands over the mound and repeats the following verses: 'Oh Mother Earth, we make this body over to thee in presence of the gods Brahma and Vishnu, who are our witnesses. Do thou protect it. Oh God Shiv, we worship thy feet with reverence.' [The Marathi runs: Dhartari mai pinlaku rakh, Brahma Vishnu saksk; Om namas'Shivayanamo charanpuja padukaku adesh.] While he is repeating these verses the rest of the mourners stand with handfuls of dust, and as soon as the last word is repeated throw the dust on the mound. They return home, rub ashes on their brows, and are pure. They observe no mourning. On the morning of the third day, they go to the burial ground and offer the dead cooked rice and cakes. On the eleventh night a flower garland is hung from a beam of the house and under the garland is placed a water-pot or tambya, a dough lamp with butter in it is set close by, and a goat is offered. The spirit of the deceased comes into one of his kinsmen, and tells what his wishes are, and how he came by his death. After the spirit of the deceased has left him the possessed person lies senseless on the ground, and the house-people say the dead has reached the gates of heaven. The ceremony ends with a feast. They allow child and widow marriage and polygamy, but not polyandry. They have a caste council and settle social disputes at mass meetings of the caste. They send their boys to school till they learn to read and write. They are a steady class.

SALIS.

Sa'lis, or Weavers, returned as numbering 3802, are found in all Sparge towns. They are of two divisions Maratha Salts and Padma Salis who neither eat together nor intermarry. The Maratha Salis look like Marathas, and as a class are dark, strong, and well-built. The men

shave the head except the top-knot, and the face except the eyebrows, moustache, and whiskers. They live in middle-class houses one or two storeys high with brick walls and tiled roofs. Their house goods include boxes, cradles, cots, mats, carpets, blankets, and metal and earthen vessels. A few of the well-to-do have house servants and own cattle and pet animals. They are moderate eaters and good cooks. They are fond of hot dishes, and their staple food is pulse, Indian millet bread, and fish curry. They bathe regularly before their morning meal and offer food to their gods before they sit to eat. They have sweet cakes of wheat flour and mutton on holidays, and when they can afford it freely eat the flesh of goats, poultry, and fish. They are excessively fond of liquor, smoke opium hemp and tobacco, and drink bhang. The men usually wear a waistcloth, a shouldercloth, a coat or a shirt called bandi a Maratha turban, and a pair of shoes or sandals. The women plait their hair into braids but wear neither flowers nor false hair. They wear a robe hanging from the waist to the ankles with the skirt passed back between the feet, and a bodice with, short sleeves and a back. Both men and women have a store of clothes for holiday wear. They are not fond of gay colours. Their ornaments are like Maratha ornaments, the nosering called *nath*, the wristlets called got, the lucky necklace or mangalsutra, and the toe-rings called jodvis. The men wear the earrings called bhikbali and finger rings. Salis as a class are dirty, orderly, honest, hard working, thrifty, and hospitable. Their chief and hereditary calling is weaving cotton clothes. They buy cotton and silk yarn from yarn-dealing Marwaris in the Poona market and weave them into waistcloths, shouldercloths, and robes. The women do as much work as the men. They arrange thread in the warp, size the warp, and arrange the warp threads and the silk edges. Their earnings vary from 8s. to £1 (Rs. 4-10) a month. Though to some extent he profits by the cheapness of yarn, English and Bombay cloth press the hand-loom weaver hard and leave him little margin of profit. The demand is brisk during the fair season and dull in the rains. During the fair season they work from morning to evening with only a very short rest. They close their shops on the amavasya or no-moon of every month, on sun or moon eclipses, and during the Divali in October-November. They rank themselves with Marathas and never eat from Mhars or other low castes. A family of five spends 16s.to£14s. (Rs.8-12) a month on food and £1 to £1 10s.(Rs.10-15) a year on clothes. Salis as a class are religious. Their family deities are Bhavani, Bahiroba, Jogai, Khandoba, Mahadev, Narsoba, and Satvai; they also worship all village local and boundary gods Their priest is a Brahman whom they greatly respect and who is asked to officiate at all their ceremonies. Their chief places of pilgrimage are Jejuri, Pandharpur, and Tuljapur, and they keep the usual Brahmanic holidays

and fasts. Their religious teacher is a man of their own caste who lives at Benares and visits them once or twice a year. When he comes all the members of the cast contribute to feed him and present him with money. The teacher's post is elective and is given to one of the last priest's disciples soon after his death. They believe in witchcraft and soothsaying When a person is possessed the seer or devrishi is called. He visits the sick, burns frankincense before him, and waves fruit or a cock about him. Vows are made to the family gods and when the sick recovers goats are slaughtered before them. Child-marriage widowmarriage and polygamy are allowed and practised; polyandry is unknown. Women go to their parents to be confined. A midwife is called in and a pit or *mori* is dug for the bath-water. The midwife pours cold water on the child as soon as it is born and outs its navel cord which is put in an earthen pot and buried near the pit. Both mother and child are bathed in warm water and laid on a cot. The mother is fed on rice and clarified better and for three days the child is made to suck one end of a rag whoso other end rests in a cup of water and molasses. From the fourth day the mother begins to suckle the child. On the fifth a stone slab is placed near the bath-pit or *mori*. A handful of rice is placed on the slab and on the rice a silver image of Satvai is set, and about the image are scattered grains of sand, some pieces of prickly-pear or *nivdung*, some jujube tree or *bor* branches, and catechu and myrrh. A piece of squeezed sugarcane is placed at each corner of the stone slab, and before the slab the midwife lays turmeric powder, vermilion, sandal-paste, and flowers. Frankincense is burnt before the goddess, and stuffed cakes or *kanavales*, rice, and curds are laid before her, A roll of betel leaves, copper coin, sandal-paste, flowers, and food are laid in front of the image. Five married girls are asked to dine and the women of the house keep awake all night. The impurity caused by a birth lasts ten days. A girl is named on the twelfth day and a boy on the thirteenth. On the twelfth out of doors five stones are rubbed with redlead and sandal-paste, flowers are dropped over them, and stuffed cakes and rice mixed with curds are laid before them, and married women are feasted. In the evening the married women name and cradle the child and after receiving boiled gram or ghugaris, packets 'of sugar, and rolls of betel leaves, they return to their homes. The mother puts on new glass bangles and is allowed to perform her usual house work. The birth charges vary from 8a. to 10s. (Rs. 4-5). The hair both of boys and of girls is cut for the first time between the sixth month and the end of the third year. The maternal uncle of the child is seated on a low stool covered with a piece of cloth and placed on a square marked with lines of rice flour. The child sits on his lap and the village barber shaves the child's head except a tuft on the crown. Married women are asked to dine and the

barber is presented with a piece of cloth, a roll of betel leaves, and a copper coin. The child is bathed and dressed in a new suit of clothes; a goat is slaughtered, and friends and relations are feasted. The ceremony costs 4s. to 6s. (Rs. 2 - 3). Boys are married between seven and twenty and girls between five and twelve. The offer of marriage comes from the boy's father. If the girl's father approves, the boy's father visits the girl's house with music and a band of friends. He presents the girl with a green robe and bodice, marks her brow with vermilion, and gives her a packet of sugar. Betel is served and the boy's father and his friends retire. The turmeric paste is first rabbed on the bridegroom and then sent to the bride with a grate robe and bodice, A day or two after a piece of rope used in working the loom, a stone lamp, and telchis or oil-cakes are taken to Maruti's temple with music and a company of friends. Flowers are sprinkled over the god and cakes are laid before him. The loom-rope, the stone lamp, and the rice cake are taken, and they go home and tie them to a post in the booth. These articles are the marriage guardian or devak. A marriage altar or bahule is raised in a corner of the bride's booth and earthen pots are set about it. The bride-groom is dressed in a fine salt of clothes, his brow is decked with a paper brow-horn, or bashing, and he is taken on horseback to the bride's village. He stops at the village temple, and, sends to the bride his brother who is called the vardhava. At the bride's her father presents the boy's brother with a turban to be given to the bridegroom. The bestman in return hands a lucky necklace or mangalsutra to a woman in the bride's house to be tied round the bride's neck, and returns to Maruti's temple with a suit of clothes in which the bridegroom is dressed at the time of his marriage. When the bridegroom reaches the bride's house rice mixed with curds is waved round him. He is led into the booth and he and the girl are made to stand face to face on bamboo baskets placed on low stools, with a curtain held between them. The priest draws aside the curtain, throws the lucky rice or *mangaldkshat* over them and seats them both on the altar or bahule. Seven threads are twisted into a cord, which is passed round them pieces of turmeric are tied to the right wrist of the bridegroom and to the left wrist of the bride, they throw clarified batter into the sacred fire, and the hems of their garments are knotted together. They go into the house and bow before their family deities. The bridegroom steals one of-the images and the bride's mother takes it back from him giving him instead a cocoanut or a silver ring. The guests are dined. Next day a caste feast is given and sugar-cakes and rice-Hour boiled in water and mixed with molasses are eaten At night the bride's father calls his friends and kinspeople to his house and the bridegroom's father presents the bride with men robe and bodice. The couple are led on horseback in procession to the bridegroom's, and the

pots that were set about the altar or bahule are. distributed among the women quests. On reaching the bridegroom's, the neighbour women come and the couple until each other's marriage wristlets or kankans and caste-people are feasted at the bridegroom's house. A marriage costs £5 to £12 10s. (Rs. 50-125). When a girl comes of age she is impure for three days. On the fourth or on the sixteenth her lap is filled and the men of her mother's house present her husband with a new turban and shouder cloth. The girl's lap is again filled and she is presented with a new bodice and robe. Friends and kinspeople are feasted at her husband's house and the coming of age is over. The charges vary from 2s.to £2 (Rs. 1 -20). When a Sali dies, word is sent to the caste-people who meet at the house, bathe the dead in warm water, dress him in a loincloth, and put a turban on his head. The body is laid on a bier and tied to it with cord. The chief mourner holding a fire-pot by a string walks in front followed by the bearers, who fasten rice and a copper coin to the hems of the shroud. On the way they set down the bier and leave the rice and the copper coin, change their places, and again lift the bier. On reaching the burning ground, they lay down the bier and go to make ready the pile. The chief mourner sits at the feet of the dead and has his face shaved except the evebrows. The shaved hair is laid at the feet of the dead, the body is set on the pile, and the chief mourner pours water into the dead mouth and kindles the pile. When the pile is nearly burnt, the chief mourner bathes, places on his shoulder an earthen pot fall of water, and starting from the feet of the dead begins to walk round the pile. A man follows him and at the end of each turn pierces a hole in the pitcher. When he has made three turns the chief mourner throws the pitcher over his shoulder, cries aloud, and strikes his month with the back of his hands. The party bathe and return to the house of the dead to look at the lamp which has been lighted on the spot where the spirit left the body. On the second or third day the chief mourner makes ready three barley cakes called *satus*, and, with sandal-powder flowers and a water-pot, sets them in a winnowing fan and with a party of friends goes to the burial place. He gathers the ashes of the dead into a blanket, bathes, and pours water over the spot where the body was burnt. Sandal-powder, vermilion, and flowers are thrown on the spot and the barley cakes are laid, one where the feet were, one where the head was, and the third at the resting place or visavyachi jaga. All bathe and return home. The impurity lasts ten days. On the eleventh day ten wheat-flour balls or *pinds* are made and worshipped with flowers and rice grains, frankincense is bornt before them, and the chief mourner bows down to them. Of the ten balls nine are thrown into the river or stream and the tenth is offered to the crows. When a crow touches the ball the men bathe and return home. On any day

between the eleventh and the thirteenth the men of the caste are asked to dine at the house of mourning and one of his kinspeople presents the chief mourner with a turban. The death is marked by a *shraddh* or mind-rite, and the dead is also remembered during the *mahalaya paksha* or All Souls' fortnight in dark *Bhadrapad* or September on the day which corresponds to the day on which he died. The death charges vary from £1 to £2 (Rs.10 - 20). Salis are bound together by a strong caste feeling and settle social disputes at meetings of adult castemen. Breaches of caste discipline are punished with fines varying from 2s. to 10s. (Rs. 1 -5), and the amount collected is spent in caste feasts. Many set caste decrees at defiance and have to be brought to order by temporary loss of caste or other serious punishment. They send their children to school and keep them at school till they are able to read and write. They do not take to new pursuits and on the whole are a falling class.

SANGARS.

Sangars, or Weavers, are returned as numbering 809 and as found over the whole district except in Haveli and Junnar. They gay they know nothing of their origin except that they believe they were once Lingayats and were degraded because they took to fish and flesheating and to drinking liquor. Their surnames are Changle, Dhobale, Gajare, Gujare, Hingle, Kachare, and Raut, and families bearing the same surname do not intermarry. The names in common use among men are Amrita, Babaji, Jaloji, Meloji, Raoji, and Sadhu; and among women Gangabai, Gujabai, Ramabai, Saibai, and Baku. They look like Marathas and are dark, strong, and middle-sized. The men wear the top-knot moustache and whiskers, but not the beard The women tie the hair in a knot at the back of the head; they do not wear false hair or dock their heads with flowers. They speak Marathi and live in houses with mud, and brick walls and tiled root's. Their house goods include metal and earthen vessels, cots, boxes, and blankets. The men dress like Marathas in a waistcloth, waistcoat, turban, and shoes; and the women in a short-sleeved and backed bodice and a robe hanging like a petticoat. Their staple food is millet, pulse, and vegetables, but when they can afford it they eat fish and flesh and drink liquor. They are dirty, but hardworking, frugal, and orderly. Ail earn their living by blanket-weaving. They work from six to twelve and again from two to lamplight. Their women help in cleaning and spinning the wool and in arranging the warp. A family of five spends 14s. to £1 4s. (Rs. 7-12) a month on food, and about £1 10s. (Rs. 15). a year on clothes. A house costs £10 to £50 (Rs. 100-500) to build. A birth costs 2s. to 10s. (Rs. 1-5), a marriage £2 10s. to £10 (Rs. 25-100), and a death £2 to £2

10s. (Rs. 20-25). They worship the usual Brahmanic and local gods and goddesses. Their family deities are Bhavani of Tuljapur, Janai and Jotiba of Ratnagiri, and Khandoba of Jejuri. Their priests are Deshasth Brahmans who officiate at their marriages. They make pilgrimages to Alandi, Jejuri, Pandharpur, and Ratnagiri, and their fasts and feasts are the same as those of Marathas. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. Their religious guides are Jangams whom they call to officiate at deaths and give a money present. They worship the goddess Satvai on the fifth day after a child is born and name the child on the twelfth, when two married men are asked to dine. Their marriage rites are generally the same as the Maratha rites. They allow child and-widow marriage. They bury their dead and mourn them three days, with rites like those of the Lingayats. They hold caste councils, and send their boys to school for a short time. As a class they are poor.

SULTANKARS.

Sulta'nkars, also called Alitkers or Tanners, are returned as numbering eighty-nine and as found only in the city and cantonment of Poona. They say the founder of their caste was Dharmraj the eldest of the Pandav brothers, and that they came from Nagar in Marwar about two hundred years ago to earn a living. They have no subdivisions and their surnames are Butele, Chavade, Chavan, Khas, Nagar, Pohade, Sakune, Sambre, and Tepan; persons bearing the same surname eat together but do not intermarry. The names is common use among men are Ambarsing, Bbavansing, Deoji, Pandit, Rupram, Rakhma, and Sagun; and among women Hema, Kesar, Punaya, Tulsha, Sundar, and Zuma. They speak Hindustani with a mixture of Marwari. [For come here they say athini, for you thane, for take this yo le, for hef speaks ye boleche, and for he has sent for you ye thane bulayachhe. They are tall and strong with a lively expression and look like Pardeshis or northerners. They live in houses one or two storeys high with mud and brick walls and tiled roofs and keep cows and goats. Their staple food is millet bread, pulse, and vegetables, and occasionally rice. They also eat fish and the flesh of goats, sheep, and fowls. They do not eat the hare, deer, or wild hog. Their holiday dishes are a mixture of wheat butter and sugar or molasses which is called shirapuri, and sugared milk or khir. They kill a goat on Dasara Day in October and when they recover from an attack of small-pox. They take opium, drink both country and foreign liquor except date-palm juice or shindi, and smoke tobacco and hemp. Their fondness for drink is said to be increasing. The men wear the topknot, moustache, and whiskers, and a few wear beards. Their clothes are a waistcloth, shouldercloth,

turban, coat, and waistcoat. The women wear a bodice and the robe like a petticoat without drawing the skirt back between the feet. They do not wear false hair or deck their hair with flowers. Their favourite colours are yellow and red. They keep specially good clothes worth £2 to £2 10s. (Rs. 20-25) in store for holiday use and for marriages and other great family occasions. The women wear round the neck a garsvli of three or a panchmani of five gold beads worth about 10s. (Rs. 5), on the wrists silver kangnyas and gots worth 8s. to 16s. (Rs. 4-8), and on the toes silver bichves worth 8s. to 16s. (Rs. 4-8). Their chief calling is tanning hides which they buy from neighbouring villages and after tanning sell them to Chambhars and Bohoras. In tanning they use the red lac dye, matki or math a kind of bean, salt, and the bark of the tarvad tree. They do not like to say what these articles cost or to tell how the colour is prepared. Their appliances are earthen vessels or *kundyas* for steeping the hides worth 2s. to 10s. (Rs. 1-5), and an iron Bcraper called shipa or chhurpa worth 1 ½d. to 9d. (1-6 as.) with which they free the hides from hair. The women and children do not help in their work, and the work is at a stand during the rains. During the dry season they work from early morning to five in the evening. They generally work with their own hands. If they employ labourers they pay the workmen 6d. to 7½d. (4-5 as.) a day. Their family deities are Bahiroba of Nagar in Marwar and the goddess Ambabhavani of Tuljapur. An ordinary Maratha Brahman generally a Deshasth is their priest, and conducts their birth, marriage, and death ceremonies. They have no house images but they bow before all Brahmanic gods and goddesses. They observe the usual Brahmanic fasts and feasts, but their chief days are Maha-shivratra and Vasantpanchmi in February, Holi in March, Gudi-padva in April, Ashadhi ekadashis in July, Rakhi-paurnima in August, Dasara in October, and Divali and Kartiki ekadashis in November. They say that they do not believe in witchcraft, soothsaying, or sorcery. Their wives and children are sometimes attacked by evil spirits, and to drive out the spirit knowing men or *jantas* are consulted. An offering is made of cooked rice, a fowl, or an egg, and a piece of bread with some pot-herbs and the evil spirit goes. Their customs are the same as those of Pardeshi leather-workers. They burn their dead, and allow child-marriage widow-marriage and polygamy, but not polyandry. They have a headman styled *chaudhari* who settles their social disputes in consultation with the men of the caste. They send their boys to school for a short time. They do not take to new pursuits, and are a poor people.

SHIMPI.

Shimpis, or Tailors, are returned as numbering 8880 and as found over the whole district. They are divided into Chatur Shimpis, Konkani Shimpis, Maratha Shimpis, Namdev Shimpis, Pancham Shimpis, Shravak Shimpis, and Shetval Shimpis, who neither eat together nor intermarry. The following particulars apply to the Shravak or Jain Shimpis. They believe they came into the district upwards of a hundred years ago from Sholapur. They have no surnames. The names in common use among men are Anna, Anantraj, Neminath, Ramlakshman, Shambhavainath, Shantinath, and Tulsiram; and among women Bhimabai, Jinabai, Lakshmi, Padmavati, and Rajarnati. Their home tongue is Marathi. Their houses are lilft those of other middle-class Hindus with walls of brick and tiled roofs. Their chief house goods are metal and earthen cooking and drinking vessels. They are strict vegetarians, their staple food consisting of a millet, pulse, and vegetables. A family of five spends 16s. to £110s. (Rs. 8-15) a month on food. They never dine after dark and do not eat radishes, onions, garlic, sweet potatoes, assafoetida, honey, or clarified butter out of skin jars. he men dress like Marathas and the women do not deck their hair with flowers. The women wear the earrings called bugdias worth £1 to £1 4s. (Rs. 10-12), the nose-ring called nath worth '£1 (Rs. 10), the necklaces called mangalsutra worth 4s. to 10s. (Rs.2-5) and vairatiks worth 14s. to £1 10s. (Rs. 7-15), and the toerings called jodvis worth 10s. to £1 (Rs. 5-10) and viravlyat worth 4s. to 6s. (Rs.2-3). They are tailors, cloth-sellers, sweetmeat makers, and shop-boys, earning 10s. to £1 (Rs. 5-10) a month. A birth costs 4s. to 16s. (Rs. 2 - 8), a boy's marriage £5 to £10 (Rs.50-100), and a girl's £1 to £2 10s. (Rs. 10-25), a girl's, coming of age £1 (Rs. 10), and a death £1 to £1 10s. (Rs. 10-15). They are Jains by religion worshipping the twenty-four Jain saints or Tirthankars, and assert that they worship no Brahmanic gods or goddesses except Balaji. Their priests belong to their own caste The midwife is either a Shravak Shimpi or a Maratha; after a birth if the midwife is a Shimpi she gets glass bangles, if a Maratha she gets Is. to 2s. (Re.£-1) in cash. The navel cord is put in an earthen jar and buried somewhere in the house. On the fifth day after a birth they place a stone slab or pata in the mother's room On the slab they lay the knife with which the child's navel cord was cut, a gold or silver mask or tak of the goddess Satvai, and an inkpot paper, and pen. The whole is worshipped and cooked food is offered to it. They consider the mother impure either for twelve days if the child was a boy or for forty days if the child was a girl. At the end of this time they name the child, the name being given by the child's paternal aunt. At some time in the life of a boy between his fifth month and his fifth year his hair is clipped with scissors and five married women are feasted. Their boys are girt with the thread before

they are ten. In the morning before a thread-girding the priest bathes the image of Parasnath with curds, milk, honey, sagr, and clarified butter, lays over the image the sacred thread to be worn by the boy, and repeats sacred verses. A metal pot filled with water, and with five betelnuts and a cocoanut in the mouth of it is worshipped, and the water from the pot and that with which the image of Parasnath was washed is sprinkled over the boy's body His brow is marked with sandal, and the sacred thread is fastened round his neck. From this time he becomes a Jain, and is strictly forbidden to eat after lamplight in case he should cause loss insect life. They marry their girls before they come of age, and their boys before they are twenty-five. They first rub turmeric on the girl's body and afterwards on the boy's. At both the boy's and the girl's houses Parasnath's image is bathed with milk, curds, honey, butter, and sugar, and worshipped. The boy starts for the girl's on horseback, and waits at Parasnath's temple in her village. The girl's father goes to the boy and gives him a turban, and lays before the god a packet of betelnut and leaves, and the boy starts for the girl's house. Before entering the house the girl's relations wave over his head cooked rice, curds, and a cocoanut, and throw them away. The boy and girl are married standing face to face on low wooden stools; turmeric roots are tied with a piece of yellow thread to the left wrist of the girl and to the right wrist of the boy, and a sacrificial fire is lit. The skirts of the boy's and girl's clothes are tied together and they bow before the house gods. Next morning either a cocoanut or a betelnut is rubbed with redlead or shendur and worshipped as the god Kshetrapal or the field guardian. The ashes of the sacrificial fire are cooled with milk and a feast is given. In the evening the boy goes with his bride to his parents' house in procession and on the following morning a caste feast is given. This ends the marriage. When a girl comes of age she is seated by herself for four days. On the morning of the fifth day she is dressed in a new robe and bodice and her lap is filled with fruit and wheat. They burn the dead. When a Shravak Shimpi is on the point of death sacred books are read and a metal plate on which the images of the twenty-four Tirthankars are engraved is washed, and the water sprinkled over the sick man's body. When life is gone, if the dead is a man he is dressed in a silk waist- cloth or mukta and rolled in a white sheet; if the dead is a widow she is wrapped in a silk waistcloth or mukta and if a married woman in a yellow robe. Half-way to the burning place the bier is set on the ground, a copper coin, a betelnut, and some rice are laid on the spot, and the bearers change places. They carry the bier to the burning ground where a pile has been raised, and the chief mourner sets fire to the pile. After the body is consumed they return home and mourn ten days, but neither the head nor the moustache of the chief

mourner is shaved. On the eleventh they go to the temple of Parasnath, bathe the god, put on new sacred threads, and return home. On the thirteenth day the image of Parasnath is Worshipped in the house of mourning and the chief mourner's brow is marked with sandal. A feast is given to the four corpse-bearers and to near kinspeople and the chief mourner is presented with a turban. They have a headman called *chavdhar* who settles social disputes. They send their boys to school for a short time, and are 4 steady class.

NAMDEV SHIMPIS say that Namdev, the founder of their caste, sprang from a shell or shimpla which his mother Gonai found in her water-jar when she was filling it by the river side. They believe they came to the Poona district about 150 years ago, from Bidar in the Nizam's country and were known by some other name which they say they have forgotten. A great famine drove them from their homes and they spread over the West Deccan and the Konkan. They have no divisions. The names in common use among men are Ganpati, Keshav, Lakshman, and Ramchandra; and among women A'nandi, A'vdi, Kashi, and Rama. Though generally dark some are fair and regular-featured. The men wear the topknot, and moustache, but neither the beard nor whiskers. The women, who are proverbially handsome, tie their hair in a knot behind the head. Their home tongue is an incorrect Marathi. They own houses with brick walls and tiled roofs. Their daily food is millet, rice, split pulse, and vegetables; and they occasionally eat fish and flesh and drink liquor. They dress like Brahmans except that the women sometimes allow the robe to fall like a petticoat without passing the skirt back between the feet. They are hardworking, guiet, sober, and hospitable, earning their living as tailors, cloth-dealers, writers, moneychangers, cultivators, and labourers. They work from six to ten in the morning and again from twelve to lamplight. They make and sell coats, waistcoats, shirts, trousers, and caps; they are helped by their women and by their children of fifteen and over. They keep ready-made clothes in stock. A ready-made coat according to the quality of the cloth sells at Is. to 2s. 6d. (Rs.½-1 ¼); a waistcoat bandi or pairan at 3d, to 7 1/2d. (2-5 as.); a cap at 11/2d. to 6d. (1-4 as.); a chanchi or bag with pockets at 6d. to 2s. (Re. 1/4-1). If the cloth is supplied by the customer, the sewing charges are for a coat 9d. to 2s. 6d. (Re. 3/8-1¼), for a waistcoat 3d. to 1s. (2-8 as.), for a sleeveless jacket 1 $\frac{1}{2}d$. to 3d. (1-2 as.), for a pair of trousers 3d. to 2s. (Re. 1/8 -1), for a cap 3d. to 6d. (2-4 as.), for a chanchi or a bag with pockets 3d. to 6d. (2-4 as.). They have slang words for money. A rupee is navvanav, eight annas tali, four annas pakari, two annas chahari, one anna poku-dhokle, half an anna avru-dhokale, and a quarter anna dhokla. Two rupees are avru bhurke, three rupees udanu

bhurke, four rupees poku bhurke, five rupees mullu bhurke, six rupees sel bhurke, seven rupees peitru bhurke, eight rupees mangi bhurke, nine rupees tevsu bhurke, ten rupees anglu bhurke, eleven rupees epru bhurke, twelve rupees regi bhurke, thirteen rupees tepru bhurke, fourteen rupees chopdu bhurke, fifteen rupees tali bhurke, sixteen rupees koku khauchkate bhurke, seventeen rupees udanu khduchkdte bhurke, eighteen rupees dvaru khauchkate bhurke, nineteen rupees navydnav khduchkdte bhurke, twenty ruees kate bhurke, twenty-one rupees navyanav kate bhurke, twenty-two rupees dvartdn kate bhurke, twenty-three rupees teputdn kdte bhurke, twenty-four rupees chopdutan kate bhurke, twenty-five rupees talitan kate bhurke, twenty-six rupees koku khauch kate tan bhurke, twenty-seven rupees udhanu khauch kate tan bhurke, twenty-eight rupees dvru khauch kate tan bhurke, twenty-nine rupees navydnav khauch kate tan bhurke, thirty rupees tan kate bhurke, thirty-one rupees eprue tan kate bhurke, forty rupees angul khauch kate bhurke, forty one rupees avaru kate navyanav bhurke, fifty rupees tal bhurke, sixty rupees udanu tan kate bhurke, seventy rupees udanu katya angul bhurke, eighty rupees kati khauch biti bhurke, ninety rupees angul khauch biti bhurke, one hundred rupees biti bhurke, one thousand rupees dhakar. They worship the ordinary Brahmanic gods and goddesses. Their chief objects of worship are Bahiroba, Balaji of Giri, Bhavani, Janai, Jotiba, Khandoba, Satvai, and Vithoba. Their priests are the ordinary Deshasth Brahmans. They keep the regular Hindu fasts and feasts and go on pilgrimage to Pandharpur and Benares. On the fifth day after the birth of a child on a grindstone in the mother's room an image of Balirama is drawn and on its chest is placed a metal plate or tak with an image of the goddess Satvai impressed on it and they are worshipped by the midwife as house gods are worshipped. At night, outside of the mother's room on the wall near the door, are traced with charcoal two inverted or *ultya sultya* pictures of the goddess Satvai, and in the mother's room seven perpendicular lines are drawn and worshipped by the midwife. The mother is held impure for ten days and on the twelfth or thirteenth the child is named by the women of the house. The expenses during the first thirteen days vary from £1 to £1 14s. (Rs.10-17). They are Shudras and do not wear the sacred thread. Their (Customs closely resemble those of Marathas. A marriage costs the boy's father £10 to £30 (Rs. 100 - 300) and the girl's father £2 10s. to £20 (Rs. 25 - 200). They allow widow marriage and practise polygamy. They burn their dead spending £1 to £2 (Rs. 10 - 20) on the funeral. They have a caste council and decide disputes at mass meetings of the castemen. They send their boys to school but only for a short time. The use of sewing-machines has much reduced the demand for their work, still as a class they are fairly off.

SONARS

Sonars, or Goldsmiths, are returned as numbering 9240 and as found over the whole district. They are divided into Ahir, Lad, Konkani or Daivadnya, [The Daivadnya Sonars claim to be Brahmans. Thaua Statistical Account, Bombay Gazetteer, XIII. Part I. 139-140. Panchal, [An account of Panchal Sonars and Tambats is given in the Sholapur Statistical Account. and Deshi Sonars, who do not eat together or intermarry. A'HIR-SONARS, who originally probably belonged to the Ahir or herdsman class, say that their proper name is not Ahir but Avheri, because they at one time slighted avherne the Veds, and took to flesh and fish eating and widow-marriage. It is not known when or from what part of the country they came to Poona. According to one account they came from Vadkher, about twelve miles north of Nasik, a hundred and fifty to two hundred years ago. Some say they came from Aurangabad and Others from Upper India or Malwa. They have no divisions. Their surnames are A'nakai, Bhagurkar, Gandapurkar, Jadhav, Patankar, Pingle, Tegudkar, and Vaya. The names in common use among men are Balshert, Gopshet, and Ramshet; and among women Gopikabai, Krishna, and Radhabai. Their family stocks or gotras are Bhargay, Jamadagni, Katyayan, and Vashisth. They closely resemble Gujarat Brahmans. They are middle-sized, fair, and goodlooking, with regular features. They speak Marathi and use slang or lidu words for money, as pan for four annas, two pans for eight annas, and managibava for a rupee. Their houses are the same as those of other middle-class Hindus with brick walls and tiled roofs. Their chief article of furniture is metal and earthen 'vessels. They generally own a cow or two and some goats and parrots. To build a house costs £20 to £400 (Es. 200 - 4000), and to rent a house costs 3a. to £1 10s. (Rs. 1½-15) a month. Their staple food is rice, split pulse, and vegetables, and once or twice a week fish and the flesh of sheep, goats, and domestic fowls. They drink liquor occasionally and do not object to eat the flesh of the hare or the deer. They are much given to smoking tobacco; no goldsmith's shop is without its pipe. At their feasts, like Brahmans they prepare several sweet dishes, costing 6d. to 9d. (4-6 as.) a guest A family of five spends £1 to £2 (Rs. 1U-20) a month on food. Both men and women are clean and neat. The men dress like Maratha Brahmans in a waistcloth, coat, waistcoat, shouldercloth, large flat turban, and square-toed shoes. The women do not draw a shawl over the head, and do not deck their hair with flowers; they say the wearing of flowers in the hair belongs to prostitutes and dancing girls. They do not wear false hair, but mark their brows with redpowder. Their ornaments are the same as those worn by Brahman women. Formerly they wore silver ornaments and a gold *moti* in the

nose; now they prefer either to wear hollow gold ornament or to go without ornaments altogether rather than wear silver nose-rings or a gold instead of a pearl moti. A few keep clothes in store, and the yearly cost of clothes varies from £4 to £7 (Its. 40-70). They are clean, hardworking, even-tempered, hospitable, and orderly. They make and mend gold and silver ornaments, set gems, and work in precious stones, and a few are moneylenders. To open a shop a goldsmith musfekave-'at least £t' (Sta. 10). They work to order and make 10s. to £2 (Rs. 5-20) a month. Their craft hereditary. Boys begin to help after ten or twelve and are skilld workers at fifteen. The names of some of the ornaments they make are, for the head, kekat of gold one and half to two tolas and costing 3s. to 4s. (Rs. 1J-2) a tola to make; kevda of gold, one to one and a half tolas and costing 3s. to 4s. (Rs. 1 ½-2) a tola to make; rakhdi of gold one to two tolas and costing 2s. to 4s. (Rs.1-2) a tola to make; muda of gold, one to one and a half tolas costing 2s. (Re. 1) a tola to make; nag or cobra of gold one to two costing weight and costing 2s. to 4s. (Rs. 1-2) a tola to make; sules or nags of gold, five seven or eleven in number, together weighing one to two tolas and costing 4s. (Rs. 2) to make; a pair of gold gondes six mases to one tola in weight and costing 2s. (Re. 1) to make; phirkichi phule either of gold or silver weighing six mases to two tolas and costing 2s. to 4s. (Rs. 1-2) to make. For the ears, bugdis of gold with forty to fifty sixty ninety or even as many as a houndred pearls, six mases to one tola in weight and costing 2s. (Rs.1) to make; kap of gold and pearls, the pearls numbering fifty to two hundred and the gold weighing one to one and a half tolas and costing 4s. (Rs. 2) to make; velebalya with twenty to thirty pearls costing 2s. (Re. 1) to make; pankhabdlya, kasbaly, or kasavbalya of gold varying in value from £1 to £10 (Rs. 10-100) and costing 6d. to Is. (4-8 as.) to make; bhigabali of gold six mases to one tola in weight having two pearls and one coloured glass pendant or drop, and costing '3d. to Is. (2-8 as.) to make; chavkada of gold six mases to one and a half tolas in wight, valued at £5 to £50 (Rs. 50 - 500) and costing 2s. to 3s. (Rs. $1-1\frac{1}{2}$) to make; kudkichi jute of gold, weighing three to nine masas) having six pearls and a diamond in the middle, valued at 10s. to £10 (Rs. 5 -100) and costing 3d. 9d. or 1s. (2, 6, or 8 as.) to make. For the nose, nath of gold, six masas to two tolas in weight, with sixteen to twenty-five pearls and a diamond in the middle, is valued at £6 to £50 (Rs.60-500) and costs Is. to 2s. (Re.4-1) to make. For the neck, thusya or ghagrya of gold four to ten tolas in weight and costing 2s. to 4s. (Rs. 1 - 2) a tola to make; tika of gold, six mases to two tolas in weight and costing 2s. to 4s. (Rs. 1-2) to make; sari of gold five to twenty tolas in weight and costing 3d. (2 as.) a tola to make; putalyachi-mal of gold having twelve to fifty coins costing 3d. (2 as.) to make; javachi-mal of

gold three to eight tolas in weight and costing 2s. to 4s. (Rs. 1 -2) to make; bar-mal of gold one to two tolas in weight and costing 2s. to 4s. (Rs. 1 -2) to make kantha of gold five to twelve tolas in weight and costing 2s. (Re.1) the tola to make; panpot or tandali of gold one to three tolas in weight and costing 2s. (Re. 1) to make; chinchpatya or tamarind-leaf of gold one to three tolas in weight having forty to two hundred pearls and costing 2a. to 8s. (Rs. 1-4) to make; mangalsutra or the lucky thread of gold two *mases* in weight and costing 6d. (4 as.) to make; gap of gold weighing one sher to five shers and costing 4s. (Rs. 2) a sher to make; chandrahar of gold six tolas to two shers in weight and costing 2s. to 4s. (Rs. 1-2) a tola to make; kanthi of gold one to four tolas in weight having ten to a hundred pearls and a diamond and costing 2a to 4s. (Rs.1-2) a tola to make. For the hands, patlya of gold one to twelve tolas in weight and costing 1 1/2d. (1 a.) a tola, but if they are made hollow 2s. (Re. 1) a tola; gots or kakans of gold, twelve to twenty-four tolas in weight and costing 11/2d. (1 a.) a tola to' make; kangnya of gold five to seven tolas in weight and costing 2s. (Re. 1) to make; tode of gold sixteen to twenty-six or thirty tolas in weight and costing 6d. (4 as.) a tola to make; dandolya or vakya of gold eight to sixteen tolas in weight and costing 6d. (4 as.) a tola to make; bajuhands of gold two to four tolas in weight and costing 2s. (Re. 1) to make; kadi of gold eight to fifty tolas in weight and costing 1 ½d. (1 a.) a tola to make; angthya of gold, set with gems, weighing one to two tolas in weight and costing 6d. to 1s. (4-8) as.) a tola to make; jodvis of gold two to four tolas in weight and costing 1s. (8 as.) a tola to make. For the feet, sakhalya of silver twenty-five to one hundred tolas in weight, and costing \(^3\)4d. to 1\(^1\)2d. $(\frac{1}{2}-1 \ a.)$ a tola to make; vale of silver one to ten tolas in weight and costing 3d. (2 as.) a tola to make; tordya or paijan of silver ten to twenty-five tolas in weight and costing 6d. (4 as.) a tola to make; raniodvi of silver four tolas in weight and costing 1 1/2d. (1 a.) the tola to make; jodvis of silver eight to sixteen folas in weight and costing 1 ½d. (1 a.) a tola, to make; virolya of silver six to eight tolas in weight and costing 1s. to 2s. (Re. ½-1) to make; masolya of silver four to six tolas in weight and costing 1 ½d. (1 a.) a tola to make; and phule of silver five and a half to six tolas in weight and costing 1½d. (1 a.) a tola to make. The names of some of their tools and appliances are the airan or anvil costing 2s. to 10s. (Rs.1 -5); hatodis or hammers costing 1s. to 2s. (Re. $\frac{1}{2}$ -1); sandsi or tongs costing 3d. (2 as.); savana or nippers 3d. (2 as.); katris or scissors 6d. to 2s. (Re.¼-1) the pair; kamokhi or tongs 1s. to 2s. (Re. ½-1); a jantra or wiredrawer 2s. to 4s. (Rs. 1-4); an othani or metal mould 1s. to 2s. (Re. 1/2-1); a kundi or stone-jar 3d. to 6d. (2-4 as.); a kanas or file 6d. to 2s. (Re.¼-1; a bhatti or earthen kiln 6d. (4 as.); a mus or earthen

mould $\frac{3}{4}d$. ($\frac{1}{2}$ a.); a taraju or pair of scales 1s. to 2s. 6d. (Rs. $\frac{1}{2}$ -1 $\frac{1}{4}$); weights 1s. to 4s. 6d (Rs. 1-24); a kunchle or brush 1s. to 1s. 6d. (8-12 as.); and a *chimta* or pair of pincers 3d, (2 as.). Sonars generally work from six to twelve in the day and again from two to seven or eight in the evening. They spend £2 to £4 (Rs. 20-40) on the birth of a boy, and £1 10s. to £3 (Rs. 15-30) on the birth of a girl. A boy's naming costs 10s. to £1 (Rs. 5-10), and a girl's 4s. to 6s. (Rs.2 -3); a boy's marriage costs £20 to £40 (Rs. 200-400), and a girl's £10 to £15 (Rs. 100-150); a girl's coming of age costs £5 to £10 (Rs. 50-100); a first pregnancy £3 to £5 (Rs. 30-50); and a death £1 to £2 10s. (Rs. 10-25). They worship goddesses rather than gods and their chief goddess is Saptashringi. They have house images of a number of gods of brass, copper, and stone, and either employ Brahman priests or perform the worship themselves. They keep the Usual Hindu fasts and feasts, and their priests are Konkanasth Brahmans, whom they greatly respect. They believe in sorcery, witch-craft, soothsaying, omens, and lucky and unlucky days. Except in the following particulars their customs are the same as those of Marathas. They do not invest their boys with the sacred thread, and as a rule on pain of loss of caste marriage invitations must be sent to the houses of all castemen. At each corner of the wooden stool on which the boy and girl are bathed four earthen water jars are piled and a thread is five times passed round them and is hung round the necks of the boy and girl. On the marriage day, both at the boy's and at the girl's, five married women and other kinswomen go to the village temple of Maruti with five earthen jars filled with cold water and a winnowing fan in which another earthen jar is set and rolled round with thread and a piece of bodicecloth. In the shrine they bow to the god, return with music, and set the earthen jars and the winnowing fan before the house gods as the marriage guardian or devak. When the boy goes to the girl's house to be married, the washerwoman of the girl's family comes forward and ties pieces of turmeric root to the right wrist of the boy and the left wrist of of the girl. Sonars are bound together as a body, and they settle their social disputes at caste meetings. During the last ten years they have levied a marriage tax of 6s. (Rs.3), the boy's father paying two and the girl's-father one rupee. With this money they have built a caste house and intend to build another when they have funds enough. They send their boys to school till they are ten or twelve and have learnt a little reading writing and counting. As a class they are well-todo.

TAMBATS.

Ta'mbats, or Coppersmiths, are returned as numbering 1106 and as found over the whole district. They are divided into Konkanis, Panchals, and Gujars, who neither eat together nor intermarry According to their own story the founder of the Konkani coppersmiths was Mundhahu whose history is given in the Kalikapuran. They say they came from the Konkan about a hundred years ago. The names of their chief family stocks or *gotras* are Angira, Atri, Bharadvaj, Bhrigu, Jamadagni, and Kashyap. Members of the same family stock cannot intermarry. Their surnames are Dandekar, Dese, Kadu, Karde, Lanjekar, Lombare, Phule, Pimpale, Potphode, Salvi, Sapte, and Vadke. Sameness of surname is not a bar to marriage. The names in common use amang men are Ganpat, Hari, Raghoba, Raoji, Savalararn, and Vithoba; and among women Chima, Goda, Kashibai, Lakshmi, and Radha. They are of middle stature, stout, and muscular. They are said to suffer from a disease of the bowels called *chip* of which many of their young children die. They speak Marathi and live in houses of the better sort one or more storeys high with walls of brick and tiled roofs. The furniture includes metal and clay vessels, cots, bedding, boxes, and cradles. They eat fish and flesh, and drink liquor and their staple food is millet and vegetables. They dine in a silk or woollen waistcloth and give feasts of sweet cakes, sugared milk, and rice flour balls. The men and women dress like Deccan Brahmans, the men in a waistcloth, coat, waistcoat, shouldercloth, and turban folded in Deccan Brahman fashion; and the women in a long full Maratha robe. The names of some of the vessels they make are, for holding water ghdgar hdnria and tapele; for cooking bagune patch; for covering jhakni, rakabi, and shibe; for plates parath and tarman; for bathing ghangal; for making cakesparat; for drinking gadve and tambe; for storing water jamb, jhari, khodva, nand, panchpatris, phulpatra, rampatra, and vadga; for holding things dabe and karande; for cups vatya; for heating water or oil kadhai; for ladles, kaltha, pal, pali, and thavar. They sell brass vessels at 1s. 1½d. (13 as.) and copper vessels at 2s. 6d. (Rs.11/4) the pound. They also make small articles, children's toys, combs, inkstands, betel boxes, chairs, tables, cots, cradles, dolls, stools both high and low, and kettles varying in value from 3/4d. to £2 (Rs. \% 2-20. They work from early morning and sometimes from before daybreak till noon and again after a short nap from one or two to seven. They employ boys above fifteen and pay them 8s. to 12s. (Rs.4-6) a month without food. They generally work for Marwari Vani and other wholesale dealers and shopkeepers and are paid 1s. to 1s. 6d. (8-12 as.) a day. They also deal in bangles, their women making lac and wire bracelets. They hold themselves as high if not higher in rank than Deshasth Brahmans, and far above Konkanasths, who, they say, are Parashuram's creation. Their women

do not help them in their calling. A family of five spends £1 to £1 12s. (Rs. 10 -16) a month on food, and £2 to £3 (Rs. 20-30) a year on dress. A house costs to build £10 to £60 (Rs. 100-600) and to rent 2s. to 4s. (Rs. 1 -2) a month. Their house-hold goods and furniture are worth £7 to £200 (Rs. 70-2000). A birth costs them 10s. to£l (Rs. 5-10), a hair-cutting 6s. to 10s. (Rs. 3-5), a thread-girding £1 to £2 10s. (Rs.10-25), the marriage of a boy £7 10s. to £10 (Rs. 75-100) and of a girl £5 to £7 (Rs.50-70), a girl's coming of age £2 to £3 (Rs. 20-30), and a man's death £1 to £1 12s. (Rs. 10-16), a widow's 16s. to £1 (Rs.8-10), and a married woman's £1 4s. to £1 16s. (Rs.12-18). They worship the usual Hindu gods and goddesses. Their family deities are Bahiri, Bhavani, Chandika, Ekvira, Khandoba, Kuvarika, and Mahalakshmi. Their family priests are Deshasth Brahmans whom they call to perform birth, thread-girding, marriage, death, and anniversary ceremonies. They are more given to the worship of goddesses than of gods, and the goddess Kalika is their chief object of worship. They make pilgrimages to Benares, Prayag, Alandi, Pandharpur, and Tuljapur; and keep all Hindu fasts and feasts. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles and numbers. A woman stays at her husband's house for her first confinement. After the child is born the mother is washed from head to foot in warm water. The goddess Satvai is worshipped on the fifth or seventh day after a birth and her image is tied round the child's neck or arm. The mother and the family are impure for ten days. On the twelfth the child is named by some elderly woman. Twelve dough lamps are made. Four of them are set one near each leg of the cradle and cot, one on each side of the mother when she sits near the cot on a low wooden stool, one near the bathing pit, and one near the *tulsi* plant. Boys have their hair cut with scissors before they are twelve months old, and are girt with the sacred thread before they are eight. They marry their girls before they are ten and their boys before they are twenty. They allow widow marriage, but if a widow chooses she may shave her head, when she is past forty. They have a caste council, and settle social disputes at meetings of the castemen. They send their boys to school. The competition of foreign copper and brass sheets has deprived the Tambats of much of their former trade. As a class they are said not to be prosperous.

TELIS.

Telis, or Oilmen, are returned as numbering 8710 and as found over the whole district. They are divided into Pardeshi, Shanvar, Somvar, and Lingayat Telis. Of these the Shanvar Telis are Beni-Israels, the Somvar Telis are Marathas who do not differ from Maratha Kunbis, and

the Lingayat Telis do not differ from other Lingayats. None of these subdivisions eat together or intermarry. The Maratha or Somvar Telis are the same as cultivating Marathas, and look and live like them. Their houses are like Maratha houses except that on the veranda or in the back part of the house there is an oil-mill or ghana. A Teli's house costs £20 to £40 (Rs. 200-400) to buy and 1s. to 4s. (Rs. ½ - 2) a month to rent. They have bullocks and servants whom they pay 8s. to 12s. (Rs. 4-6) a month. Their staple food includes millet bread and split pulse, and occasionally rice. They eat fish and flesh and drink liquor. A family of five spend 14s. to 16s. (Rs. 7-8) a month on food and drink. Their feasts cost them 16s. to £2 (Rs. 8-20) for every hundred guests. They both chew and smoke tobacco. They breakfast early, dine at noon, take a nap for about a couple of hours, and sup at nine. The men wear the loincloth, waistcloth, coat, waistcoat, Brahman or Maratha turban, and shoes. The women dress like Brahman women in a bodice with a back and short sleeves and a full robe whose skirt is drawn back between the feet and tucked in behind. They do not wear false hair or deck their heads with flowers. They are hardworking, sober, thrifty, and strongly made, and their women are proverbially fair and well-featured. Some extract oil from cocoanut, sesaraum, Momordioa charantia or karla, Carthamus tinctorious or kardi, groundnuts, the fruit of the oilnut tree or uhdi, and the hogplum or ambada. Others are husbandmen, labourers, cartdrivers, messengers, and oilcake-sellers. To distinguish them from Beni-Israels or Shanvar Telis that is Saturday Oilmen, they are called Somvar Telis or Monday Oilmen because they are said not to work on Mondays. Except during the rains they are employed and earn 3d. to 1s. (2-8 as.) a day. Their women help them and their boys from the age of twelve or fourteen. When they hire workmen they pay them 3d. to 41/2d. (2-3 as.) a day without food. Few oilmen have capital and none are rich. They sell oil in their houses or go about kawking it. In religion they are Smarts and have house images of Ganpati, Maruti, and other Hindu gods and goddesses. They keep all Hindu fasts and feasts and their priests are Deshasth Brahmans. Their customs are generally the same as the Maratha customs. On the fifth day after a child is born they worship the goddess Satvai, and they name the child on the twelfth or thirteenth day. Girls are generally married before they come of age and boys before they are twenty-five. They allow widow marriage and polygamy, but not polyandry. They burn their dead. They settle social disputes at mass meetings of the caste. They suffer from the competition of kerosine oil and are falling to the position of labourers. They do not send their boys to school and at present are somewhat depressed.

ZAREKARIS,

Zarekaris, or Dust-washers, are returned as numbering twenty and as found only in Poona and Haveli. They believe that they came from Aurangabad and the Nizam's country during the Peshwa's supremacy. They have no divisions and their surnames are Povar, Thombre, and Toke, and families bearing the same surname do not. intermarry. The names in common use among men are Baloba, Bhanu, Kashinath, and Rangoba; and among women Bhavani, Ganga, Guna, Mana, and Rangu. They look like Marathas and speak Marathi. The men wear the top-knot, moustache, and whiskers, but not the beard. They live in houses of the poorer sort, one storey high, with tiled roofs. Their household furniture includes boxes, cots, cradles, blankets, carpets, and guilts, and earthen and metal vessels. Their staple food is millet bread, split pulse, vegetables, and pounded chillies. They eat fish and flesh and drink liquor. Their holiday dishes are mutton and sugarcakes. Both men and women dress like Brahmans, but their women do not deck their heads with flowers or use false hair. They are a hardworking frugal people. They buy the ashes and sweepings of a, goldsmith's shop for $\frac{3}{4}d$. to 2s. (Re. $\frac{1}{3}$ 2-1) a heap, wash them, and search for gold and silver dust. They also search the ashes at the burning ground in Poona where they find small fragments of gold or silver which have been burnt with the dead, and examine marketplaces being rewarded by a chance bead or a lost copper or silver coin. They worship the usual Brahmanic gods and goddesses. Their family god is Khandoba and their priests are Deshasth Brahmans. They keep the regular Hindu fasts and feasts, and make pilgrimages to Chatarshringi, Jejuri and Pandharpur. They practise child-marriage widow-marriage and polygamy. They have no headman and settle social disputes at meetings of the castemen. They do not send their boys to school and are a poor people.

MUSICIANS.

Musicians included two classes [An account of Naikins is given in the Satara Statistical Account.] with a strength of 6229 or 0.73 per cent of the Hindu population. Of these 271 (males 108, females 163) were Ghadses, and 5958 (males 3014, females 2944) Guravs.

GHADSES

Ghadses, or Musicians, are returned as numbering 271 and as found over the whole district except in Maval and Junnar. They say that when Ram was being married to Sita there were no musicians, so Ram

made three images of sandalwood, and, breathing life into them, gave one the drum called sambal and the other two the pipes called sur and sanai. According to another story Ravan was their patron and gave the whole of the Deccan to the Ghadses. They have no subdivisions. Their surnames are Bhosle, Jadhav, Jagtap, More, Povar, Salunke, and Shinde; people with the same surname eat together but do not intermarry. The names in common use among men are Bhaguji, Bhovani, Chima, and Savlya; and among women Bhagirthi, Chima, Ganga, and Rukhmini. They are generally dark and middle-sized and look more like Mhars than Kunbis. The men wear the top-knot, moustache, and whiskers, but not the beard. Their home tongue is Marathi, and in house food and dress they differ little from Kunbis. They are hardworking, even-tempered frugal, and hospitable,' but fond of pleasure. They play on the drum and pipes and are good singers. Their instruments are the sanai costing 10s. (Rs. 5), the sur 4s. (Rs. 2), the sambal £1 (Rs. 10), and the kettledrum or nagara £2 (Rs. 20). During the marriage season they are very busy and on holidays and in the evening amuse people with songs. A family of five spends 14s. to £1 (Rs. 7-10) a month on food, and £2 to £2 10s. (Rs. 20-25)a year on clothes. Their furniture and goods vary in value from £4 to £8 (Rs. 10-80). A birth costs them £1 (Rs. 10), ahair-clipping 4s. to 10s. (Rs. 2-5), the marriage of a boy £10 to 15 (Rs. 100-150), the marriage of a girl £5 to £10 (Rs.50-100), and a death £1 to £2 10s. (Rs. 10-25). Their religious and social customs do not differ from those of Kunbis, and, except that men who have married widows are buried, they generally burn their dead. The unmarried are carried in a blanket or jholi on the shoulders of two men; others are laid on a bier. They allow widow marriage and practise polygamy; polyandry is unknown. They settle disputes at caste meetings. They are generally poor and are little patronised by high-caste and well-to-do Hindus.

GURAVS.

Guravs are returned as numbering 5958 and as found over the whole district. They say they have been in the district more than three hundred years, but they have no tradition of their origin of any former settlement. They have no subdivisions. Their surnames are Bedse, Bohiravkar, and Borkar, who eat together and intermarry. The names in common use among men are Dhondiba, Kondiba, Martand, and Mahadev; and among women Dhondi, Kashi, Kondi, Krishnabai, and Venubai. They look like Marathas. Some of the men wear the top-knot and moustache, while others dress like Gosavis with matted hair and beards and bodies rubbed with ashes. Their home tongue is Marathi and their houses are like those of middle-class Hindus averaging £10

to £150 (Rs. 100-1500) in value. Most families keep a few cattle and their houses are fairly supplied with earthen and metal cooking and drinking vessels. Their staple food is Indian millet millet rice and vegetables, and they neither eat fish nor flesh nor drink liquor. A family of five spends 10s. to 16s. (Rs.5-8) a month on food, and £1 to £3 (Rs. 10-30) a year on dress. They dress either like Deccan Brahmans or Marathas. The women wear the bodice and the full Maratha robe passing the skirt back between the feet and tucking it into the waist behind. They beg and are hereditary servants in Shiv's temple living on the offerings made to the god. They are good musicians playing the drums called pakhvaj and chaughada and the clarion or sanai at marriages or as an accompaniment to dancing-girls. They make leaf-plates and saucers and sell them to villagers. They are believed to have power over the god whose servants they are, and are much respected by the lower classes. They are Shaivs in religion and have house images of Bhavani, Ganpati, and Khandoba. They have priests belonging to their own caste, and in their absence call Deshasth Brahmans to their houses. On the fifth day after the birth of a child they worship the child's navel cord which was cut on the first day after birth. They place it on a stone or pata, with sandal, turmeric, and redpowder, and lay before it cooked rice, split pulse, methi or fenugreek, and wheat cakes or polis. In the evening a drawn sword with a lemon stuck in its point is placed in the corner near the mother's head, or if there is no sword a small stalk of *ivari* or Indian millet is laid near each of the leas of the mother's cot. The women of the house stay awake during the night to prevent the child being carried off by Satvai. On the twelfth day the mother worships seven pebbles outside of the house and some old woman of the house names the child. A boy's hair is cut when he is one to three years old and five married women are feasted. The expenses in the first twelve days after a death vary from 10s. to £1 4s. (Rs. 5-12). They gird their boys with the sacred thread between five and ten and spend 10s. to £5 (Rs. 5 - 50) on the ceremony. They marry their girls between five and nine, and their boys between ten and twenty-five. A girl's marriage costs £1 to £2 (Rs. 10-20), and a boy's marriage£10to £12 10s. (Rs. 100-125). They burn their dead except children below three whom they bury. A death costs them £1 to £2 (Rs. 10 - 20). They have a headman or mehetrya who settles social disputes in consultation with the men of the caste. A person who has been put out of caste is not allowed to come back until he gives a caste feast or some betel packets. As a class Guravs are poor.

SERVANTS.

Servants included two classes with a strength of 16,330 or 1.92 per cent of the Hindu population. Of these 10,155 (males 5252,, females 4903) were Nhavis or barbers; and 6175 (males 3068, females 3107) Parits or washermen.

NHAVIS.

Nha'vis, or Barbers, are returned as numbering 10,155 and as found over the whole district. They say the founder of their class was the serpent Shesh that encircled Shiv's neck and who was told to take human form at the time of the thread ceremony of the god Brahma. For this reason they hold themselves superior to Brahmans and other castes, even to the god Vishnu. They say it was not Brahma who cheated the universe, but Shiv for, before the creation, of the universe, Shiv and the serpent Shesh were in existence. They are divided into Gangatirkar Nhavis, Ghati Nhavis, Gujarati Nhavis Khandeshi Nhavis, Kunbi Nhavis, Madrasi Nhavis, Marwari Nhavis, Pardeshi Nhavis, Tailang Nhavis, Vaideshi Nhavis, and Vajantri Nhavis. Of these Kunbi and Ghati Nhavis eat together; none of the subdivisions intermarry. The Gangatirkar or Godatvari Nhavis Ghati or Sahyadri Nhavis, Kunbi or husbandman Nhavis, Vajantri or musician Nhavis, and Vaideshi or Nhavis from Vai in Satara, come under Marathi Nhavis, to whom the following particulars apply. The surnames and the names in common use both for men and women are the same as those of Marathas, and Nhavis do not differ from other Marathas in appearance, speech, house, food, or dress. They are quiet orderly people, hardworking but extravagant, showy and fond of talk and gossip. They are barbers, and as village servants bleed and supply torches, and their women act as mid wives. Many enjoy the sole right of shaving in certain villages for which the husbandmen pay them a small share of their crops At marriages they hold umbrellas over the heads of the bride and bridegroom. Besides this Gangatirkar, Kunbi, and Vajantri Nhavis act as musicians at marriages and other ceremonies, and Khandeshi Nhavis act as torch-bearers. The rates charged by barbers of the different subdivisions vary little. For shaving the *head* of a boy of less than twelve they charge 3/8d. (1/4 a), for a beardless youth above twelve 3/4d. (½ a.), and for a man 1d. or $1\frac{1}{2}d$. (3/4 - 1 a.), though they are sometimes paid as much as 3d (2 as.). Their women do not help except by acting as midwives and attending some of the richer women of the village. Boys begin to learn to shave when they are twelve years old. An earthen jar is whitewashed or rubbed with wet ashes, and the boy is told to scrape it slowly with a razor. A barber makes 14s. to £2 (Rs.7-20) a month. His appliances are razors or vastaras both country made and European, a pair of pincers or

chimtas, a pair of scissors or kataris, an instrument for paring the nails or narani, a razor-strap or palatne of leather, a shilai or stone, a kangva or comb, a cup or vati, a handkerchief or rumal, a looking glass or arasa, a leather bag or dhokti, a bottle or kupi, a brush or burus, and soap or saban, together valued at 2s, to £1 12s. (Rs. 1-16). A family of five spends £1 to £2 (Rs. 10 - 20) a month on food and about £2 (Rs. 20) a year on clothes. A house costs £10 to £30 (Rs. 100-300) to build, and 2s. (Re. 1) a month to hire. The birth of a child costs 10s. to £1 (Rs 5-10), the marriage of a boy £6 to £10 (Rs. 60-100), the marriage of a girl £2 10s. to £5 (Rs. 25-50), and a deaths £1 to £4 (Rs. 10-40). In religion they do not differ from Kunbi. They claim the right to wear the sacred thread, but this right the Brahmans deny. On the fifth day after the birth of a child they worship the goddess Satvai with pomegranate or dalimb flowers, and offer her wheat bread, rice, and vegetables. On the morning of the twelfth day the mother sprinkles water, scent, and flowers over seven pebbles outside of the house. In the evening the child is cradled and named by married women. They clip a child's hair between its fourth month and its third year. They marry their girls before they come of age and their boys before they are twenty-five. Their marriages do not differ from Maratha marriages, and their marriage-guardian or devak is the panehpallav or the five-leaf god the four figs and the mango. During the marriage ceremony the bride and bridegroom stand face to face on two bamboo baskets. They either bury or burn their dead. They allow widow-marriage and polygamy, but not polyandry. They have no headman and their social disputes are settled at meetings of the castemen. They send their boys to school for a short, time. They are steady and well-to-do but none have risen to any high position.

The TAILANG NHAVIS say that they came from the Telugu country about a hundred years ago. They are divided into Sajans and Shirbajs, who neither eat together nor intermarry. They are dark and short. The men wear the top-knot and moustache, but not the beard. Their home tongue is Telugu; with others they speak Marathi. They are clean, neat, hardworking, orderly, and talkative. They eat fish and flesh and drink liquor. They are fond of sour things and their staple food is millet, rice, split pulse, and vegetables. A family of five spend £1 4s. to £1 10s. (Rs. 12 -15) a month on food, and some shillings more (Re. 1/2-1) on liquor. The men dress in a waistcloth, coat, jacket, headscarf, and shoulder cloth; and the women in a black or red Maratha robe and bodice, the skirt of the robe being drawn back between the feet and tucked in at the waist behind, while the upper end is drawn over the head. They spend £1 10s. to £2 (Rs. 15 - 20) a year on dress. They are either Shaivs or Vaishnavs, and worship the

usual Brahmanic gods and goddesses. Their family goddesses are Mhaishama and Ellama whose temples are in their native country. Their priests, who are either Jangams or Deshasth Brahmans, officiate at their houses on occasions of marriage and death. When a child is born it is laid on the cot beside its mother, and a dagger with a lemon stuck in its point and a cane are kept near the head of the bed. The women stay awake the whole night and the mother is considered unclean for ten days. Their children, whether boys or girls, are named either on the twelfth or the thirteenth day after birth and a feat is given to five married women. During the thirteen days after a birth expenses vary from 6s. to £1 (Rs.3-10). When the child is between a year and a half and five years old its head, whether it is a boy or a girl, is shaved. The child is seated on the lap of a male relation and the hair is clipped by another and five married women are feasted; the ceremony costs 2s. to 4s. (Rs. 1-2). They marry their girls before they come of age and their boys before they are twenty-five. They have no marriage guardian or devak. A day before the marriage they go to the temple of the village Maruti, wave a lighted lamp before him, and return home. They make no marriage porch or altar, but in a room in the house raise four piles of six earthen jars each. On the marriage day they ask a couple of married women to dine and feed them on rice and pulse. After they have dined the women take the girl in their arms and go to the boy's without either men or music. The boy and girl are seated on a mat face to face and a cloth is held between them. The Brahman priest repeats verses and after he has thrown grains of rice over the boy's and girl's heads, they are husband and wife. They then change places, the boy taking the girl's place and the girl the boy's. A cotton thread is passed fourteen times round them, dyed yellow with turmeric, cut, one-half tied round the boy's and the other half round the girl's right wrist. The hems of the boy's and girl's clothes are knotted together and they are taken before the house gods, where they make a bow and the knot is untied. They are served with sugared milk or khir in a metal plate and feed one another. The maternal uncle of the boy takes the girl on his shoulders and the maternal uncle of the girl takes the boy, and they dance in front of the house while the sisters of both keep throwing in the air handfuls of wheat flour and turmeric. 2s. to 4s. (Rs. 1 - 2)of liquor is brought and drunk by the men. On the two following days feasts are held at the boy's house and the sade ceremony is performed on the third day, the girl's father presenting the boy with a turban and sash, and the boy's father presenting the girl with a robe and bodice. At night a procession is formed and the boy and girl are seated on horses and paraded through the chief streets of the village accompanied by music. Next day the earthen jars are divided among married women, and the Brahman

priest unties the threads from the boy's and girl's wrists. On the following day the girl is taken to her father's where the boy's party goes to dine and the marriage is over. The boy's and girl's fathers each give 8s. 3d. (Rs. 4 1/8) to the caste to send invitations, and 14s. (Rs. 7) for liquor in honour of the marriage. A marriage costs the boy's father £7 10s. to £10 (Rs. 75 - 100) and the girl's £2 10s. to £5 (Rs. 25 -50). When a girl comes of age she is taken to her husband's house and seated by herself for four days, and on the fifth day she is bathed and her lap filled with fruit, and the girl's mother presents the boy and girl with clothes. The ceremony costs £1 to £2 (Rs. 10 - 20). When a death occurs the whole caste is told. If the death happens after seven at night the funeral does not take place till next morning. Sometimes if death happens at six in the morning the funeral does not take place till three. The body is washed in warm water, dressed in a flax waistcloth and seated on a wooden stool outside of the house, supported by a friend on each side. A flower-seller stands with garlands in his hands, and each mourner buys one garland for about 1/2d. (1/3a.) and fastens it round the dead neck. The body is laid on the bier and the chief mourner, taking an earthen jar with burning cowdung cakes, walks in front of the bier preceded by music. About half-way to the burning ground the bier is set down and grains of rice are thrown over it. It is then taken to the burning ground and the body is either burnt or buried. When the body is buried the fire which the chief mourner brought is thrown away. A lighted lamp is set on the spot where the deceased breathed his last, and the funeral party, coming back to the house of mourning, take grass in their hands, and throw it near the lamp, and sit outside on the veranda. Liquor is served and they return to their homes. On the fourth day the chief mourner with two or four others goes to the burning ground with two earthen jars containing cooked rice and curds, and a metal vessel with water. If the deceased was buried, the mourner passes his hand over the grave; if he was burnt, the mourner gathers the ashes, sprinkles cold water over them, offers rice balls, and does not leave till a crow has touched one of the balls. The earthen jars with the rest of the rice and curds are left there and the mourners bathe and return home. On the fifth a cook is called in at the mourner's house, and the four bearers are feasted and treated to liquor. On the tenth the chief mourner's moustache is shaved, and, if they can afford it, rice balls are offered to the spirit of the dead or uncooked food is given to the priest. Either on the twelfth or thirteenth castefellows are dined and liquor is served. The funeral expenses vary from £1 to £2 (Rs. 10-20). They hold a feast a year after the death, offer rice balls, and feast castefellows. They have a caste council and settle social disputes at meetings of the castemen. They complain that they are not so well off as they were, because,

they say, people do not have their heads so often shaved. With the use of palanquins and night journeys the use of torches has almost died out, and they say they do not as before get presents of old clothes, food, or money.

PARITS.

Parits, or Washermen, are returned as numbering 6175 and as found over the whole district. They are divided into Marathi, Konkani, Pardeshi, and Kamathi Parits, who neither eat together nor intermarry. Among Marathi washermen the surnames and the names of, both men and women are the same as those used by Maratha Kunbis, and Marathi Parits do not differ from Marathi Kunbis in look, speech, house, dress, or character. Their religious and social customs are also the same. Parits generally wear articles of dress which have been sent them to be washed as the proverb says, The show is the washerman's, the clothes are another's. [The Marathi runs: Paritacha daul dusaryache panghrunavar. Their hereditary work is washing clothes. They wash outside the village in some river or pond and charge 5/8 d. to 2\(\frac{1}{4}\). (\(\frac{1}{2}\) as.) for each piece, or double and treble this rate if they are new clothes. They are paid in cash or in grain either when they bring back the clothes, or once a month, or once a year. In washing their clothes they use papadkhar or impure carbonate of soda, saban or soap, nil or indigo, and kanji or rice-starch. To wash one hundred pieces requires about one pound of soda, a quarter of a pound of soap, one tola or 210 grains of indigo, and one and a quarter pounds of starch. Their appliances are an *istari* or iron costing 10s. to £4 (Rs. 5-40), a satil or copper vessel costing 10s. to £2 (Rs. 5 - 20), and a mogara or wooden hammer worth about 1s. (8 as.). They are helped by their women and children in collecting clothes, drying them, and giving them back to their owners. A family of fire spends £1 to £1 4s. (Ra. 10-12) a month on food, and nothing on clothes as they wear clothes that are sent them to wash. A house costs £10 to £20 (Rs. 100-200) to build, and the furniture is worth £3 to £10 (Rs. 30 - 100). A birth costs about 4s. (Rs.2), a hair-clipping 2s. to 6s. (Rs. 1 - 3), a marriage £5 to £15 (Rs. 5-150), and a death 10s. to £1 (Rs. 5-10). They do not send their boys to school, and are a steady people.

SHEPHERDS.

Shepherds included two classes with a strength of 37,601 or 4.43 per cent of the Hindu population. Of these 35,595 (males 17745, females 17,850) were Dhangars, and 2006 (males 1070, females 936) Gavlis.

DHANGARS.

Dhangars, apparently originally Dhangars or Cowmen, with a strength of 35,595, are found over the whole district. A large number of Shivaji's most trusted Mavalis or Maratha footmen were west-Poona Dhangars, and many of the bravest Maratha leaders among whom the Holkars are the most distinguished, belonged to this tribe. The class is commonly known as Hatgar-Dhangar which in Marathi is supposed to mean obstinate, but the word is apparently of Dravidian origin. They say they came into the district from Phaltan in Satara where the tribe musters strong They have no subdivisions and their surnames are Gavde, Ghodke Kamble, Kende, and Koke; people with the same surname do not intermarry. The names in common use among men are Appa, Narayan, Pandu, Rakhmaji, Satvaji, and Thakuji; and among women Janabai, Mirabai, Rakhmabai, Saku, and Salu. The men are generally dark and strong. Except the top-knot they shave the head and the face except the moustache and in a few cases the whiskers. In language, house, dress, and food they resemble Maratha husbandmen. They are dirty, but hospitable, thrifty, and free from crime. They are shepherds, cattle-breeders, and cattle-sellers generally rearing buffaloes rather than cows, and they also work as husbandmen and as day-labourers. The women help the men spinning wool and selling milk, butter, and curds. They consider themselves the same as Marathas, and eat from Brahmans, Vanis, Marathas, Shimpis, Sonars, and Malis; but not from Ataris, Gkisadis, Buruds, Kacharis, or Sangars, whom they consider below them. A house costs £20 to £100 (Rs. 200-1000), to build and 1s. to 10s. (Rs. ½£-5) a month to hire. Their house goods vary in value from £2 10s. to £75 (Rs. 25-750), and their servants' monthly wages are 8s. to 16s. (Rs. 4-8) without food. A family of five spends about £1 (Rs. 10) a month on food and £2 10s. to £5 (Rs. 25-50) a year on clothes. A birth costs £1 to £1 4s. (Rs. 10-12), a hair-clipping 10s. to £1 (Rs. 5-10); a boy's marriage £10 to £12 10s. (Rs. 100-125), a girl's marriage £7 10s. to £10 (Rs. 75-100), a girl's coming of age £4 to £10 (Rs. 40-100), and a death £3 to £4 (Rs. 30-40). They worship the usual Brahmanic gods and goddesses. Their favourite objects of worship are Khandoba, Bhairoba, and ancestral spirits. They keep house images of their gods and employ and respect Deshasth Brahman priests. Their two chief holidays are Holi or Shimga in March and Dasara in October. They make pilgrimages to Alandi, Jejuri, Kundanpur, Nasik, Pandharpur, Signapur in Phaltan, and Tuljapur, Their children are named by a Brahman either on the fifth or on the tenth day after birth, and in honour of the ceremony relations and friends are feasted. At six months old both boys and girls have their heads shaved. Girls are married between four months and twelve

years and boys between one and twenty years old. The boy's father goes to the girl's and settles the marriage with her father in presence of some members of the tribe. Betelnut and cocoa-kernel are served and the boy's father pays £2 to £4 (Rs. 20-40) in cash, and about £3 (Rs. 30) in ornaments. The boy is given a turban, a waistcloth, a pair of shoes, a brass dining dish, and a drinking vessel. The Brahman priest gets 6s. (Rs. 3). The other details are the same as in the case of a' Maratha marriage. Neighbours and castemen build a porch in front of the girl's house and are repaid by a dinner. On the marriage day the boy and girl are made to stand on two grindstones each laid in a bamboo basket, and on the four corners of the basket are set blocks of Umbar wood. The marriage ceremony is in other details the same as among Marathas. After the marriage the girl remains with her parents and does not go to her new home till she comes of age. Her going is marked by a feast to friends and relations. They either bury or burn their dead according to the custom of the house. When the body is burnt the ashes are removed on the twelfth day and the bones are gathered and buried. On the twelfth and thirteenth dinners are given. The dinner on the twelfth is simply rice and pulse; on the thirteenth a goat is killed and its flesh is distributed to as many quests as possible. Those who do not share in the meat content themselves with buttermilk. The son of the deceased is presented with a turban or with 3d. to 2s. (Re. 1/8-1) in cash. Some families build a mud tomb over the grave and set stones on it. In honour of the occasion a goat is killed and a dinner is given of rice, split peas, and mutton. They allow widow marriage. Except in the month of *Paush* or December-January, the ceremony can be performed any day from sunrise to sunset. Presents are made to Brahmans and money is paid to the first husband's family without whose consent the marriage cannot take place. A necessary part of the ceremony is the striking together of the widow's and her new husband's heads. The children of the first husband live with his relations, but if there is no one to take charge of them they live with their mother and her husband. The wife and husband, as a rule, must belong to different family stocks. When several families live together in one place, their social disputes are settled by a headman or patil chosen by the caste. They are rather poor and have suffered by the spread of forest conservancy. Several have of late settled as husbandmen or begun to serve as labourers. They do not send their boys to school or take to new pursuits.

GAVLIS.

Gavlis, or Cowkeepers, are returned as numbering 2006 and as found over the whole district. They do not know when or whence they came

into the district. They are divided into Ahirs, Koknis, Marathas, Nagarkars, and Vajarkars, who neither eat together nor intermarry. Their surnames are Alamkhane, Ambarkhane, Bagvan, Bhakares, Dhamakde, Ganjevales, Ghanchakar, Hingmire, Kadekar, Khane, Mahankele, Mardkar, Mongale, Nandarkar, Nizamshai, Pharadkhane, and Shelar; people with the same surname do not intermarry. The names in common use among men are Damu, Gopal, Laximan, Maruti, Mhadu, Naru, and Savalaram; and among women, Bhagubai, Kondabai, and Ramabai. They are like Marathas in appearance and are strong and dark. The men wear the topknot, moustache, and whiskers, but no beard. They speak Marathi and have houses one or two storeys high with walls of brick or tiled roofs. They are dirty and ill-cared for, and their household goods include boxes, cots, bedding, metal vessels, blankets, and earthen jars. They have servants, and keep cattle, dogs, and parrots Their staple food is millet, Indian millet, pulse, and vegetable; they do not eat fish or flesh, nor drink liquor. They give marriage and death feasts of sugar cakes. They dress like Marathas in a waistcloth, loincloth, waistcoat, blanket, and Maratha turban; and their women wear a bodice and a robe hanging like a petticoat without passing the skirt back between the feet. They are sober, thrifty, hardworking, and even-tempered, and sell milk, curds, butter, and whey. They sell milk at twenty pints (10 shers) the rupee; curds at twenty-four to forty pounds (12-20 shers); butter at 2½ pounds (1¼ shers) and boiled milk at four to eight pounds (2-4 shers). They buy she-buffaloes from Berar Musalmans at prices varying from £2 to £12 (Rs. 20-120), and cows at £2 to £6 (Rs. 20-60). They make cowdung cakes and sell them at 4s. to 8s. (Rs. 2-4) the thousand. A shebuffaloe gives three to eight pints (1½-4 shers) of milk a day, and a cow two to five pints $(1-2\frac{1}{2} \text{ shers})$. The feed of a cow or of a shebuffaloe costs 8s. to 9s. (Rs. 4-4½) a head a month and leaves a profit of 12s. to £1 4s. (Rs. 6-12) a month on every ten cattle. Their women help in selling milk, butter, curds, and whey and in bringing fodder for the cattle. Their children graze their own and other people's cattle and are paid 3d. (2 as.) a month for each cow they herd and 3d. to $7\frac{1}{2}d$. (2-5 as.) for each buffalo A family of five spends 16s. to £1 10s. (Rs. 8-15) a month on food and £1 10s. to £3 (Rs. 15-30) a year on clothes. A house costs £20 to £50 (Rs. 200-500) to build and 4s to 8s. (Rs.2-4) a month to rent. The servants' wages with food vary from 1s. to 8s. (Rs. $\frac{1}{2}$ - 4) a month. The furniture and house goods vary in value from £2 to £7 10s. (Rs. 20-75). The birth of a son costs 2s. to 6s. (Rs. 1-3), a hair-cutting 4s. to 6s. (Rs. 2-3), a boy's marriage £5 to £20 (Rs. 50- 200), a girl's £2 10s. to £20 (Rs. 25-200), a girl's coming of age £1 to £2 10s. (Rs. 10-25), and a death £1 to £1 12s. (Rs. 10-16). They worship the usual Hindu gods and goddesses, and

their family gods are the Mahadev of Signapur, Khandoba of Jejuri, Amba of Tuljapur, Janai, and Kondai. Their priests are Jangams, but they ask Deshasth Bhahmans to officiate at their marriages. They make pilgrimages to Pandharpur, Tuljapur Kondanpur, Jejuri, Alandi, and Benares, and keep the usual Hindu fasts and feasts giving equal reverence to Mondays and ekadashis or lunar elevenths. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. They consider their women impure for ten days after a birth. On the eleventh a Jangam touches the mother's and the child's brow with ashes and they are clean. A new *lingam* is brought by the Jangam, worshipped, and tied round the child's neck. In the evening a new bodicecloth is brought, an image of Satvai is placed on the cloth, and the women of the house worship it in the mother's room with flowers and redpowder offering millet bread. A dough lamp is kept burning in front of the image and on the morning of the next day the image is tied round the child's neck. On the twelfth day the mother and child are bathed and seven pebbles are worshipped on the roadside by the mother with flowers and red and yellow powders. The child, whether a boy or a girl, is named on the thirteenth, and wet gram is distributed. They clip children's hair both boys' and girls' between the age of three months and five years, and feast a Jangam. They marry their girls before they come of age and their boys before they are twenty-five. Marriages are settled by the women of the family. The boy's mother with other female relations goes to the girl's house and asks the girl in marriage. If the girl's father agrees the boy's father and other kinsmen go to the girl's and worship a betelnut Ganpati and present the girl with a robe and bodice. Both a Jangam and a Brahman are required to be present at the ceremony. A memorandum is drawn up in which the marriage day and hour are given as well as the day on which the boy and girl should be rubbed with turmeric. Their marriage-quardian or devak is five earthen jars filled with pond or well water, which are brought on the heads of five married women, and set near the house gods. On the marriage day the boy is seated on a bullock and taken to the girl's house. Here a piece of bread and curds are waved round his head and he is taken inside the house and seated on a carpet. The girl is seated near him and in front of them are set five earthen jars and two lighted lamps. A cloth is held between the boy and girl, and the Brahman priest repeats marriage verses, and at the end throws grains of rice over their heads, and they are husband and wife. The boy and girl are seated on an altar, near relations wave a copper coin over their heads, and the coins are divided between the Brahman and the Jangam priest. On the following day a feast is held at the girl's house and on the next day the boy goes with his bride to his father's house and the

marriage ends with a feast. When a girl comes of age she is seated by herself for three days, and on the fourth day her lap is filled with fruit and grains of rice. They bury the dead, and do not hold that a death causes uncleanness. They feast the caste on the third, fifth, seventh, ninth, or eleventh day after death. They have a caste council, send their boys to school, and are a steady class.

FISHERS

Fishers with a strength of 44,306 or 5.23 per cent of whom 23,439 were males and 22,867 females, included two classes. Of these 3477 (males 1780, females 1697) were Bhois, and 42,829 (males 21,659, females 21,170) Kolis.

BHOIS.

Bhois are returned as numbering 3477 and as found over the whole district. They are divided into Kadu, Kamathi, and Maratha Bhois. Of these the Kadus and the Marathas eat together; none of the three intermarry. The surnames of the Maratha Bhois, to whom the following particulars apply, are Bhokre, Dage, Gholap, Jadav, Kamble, Musle, and Povar; families bearing the same surname do not intermarry. The names in common use among men are Bapu, Dagadu, Ganoji, Gopal, and Kashiram; and among women, Dhondi, Ganga, Kashi, Lakshmi, Parvati, and Savitri. They are generally dark, strong, and middle-sized. The men wear the top-knot, moustache, and whiskers, but not the beard. Their home tongue is Marathi. Their houses are poor. Their house goods include metal and earthen cooking and water vessels, fishing nets, blankets, and perhaps a cot, a cradle, a box, and some she-goats. Their staple food is millet, fish, and pulse. Whenever they can afford it, they eat the flesh of sheep, goats, hare, deer,' and fowls, and drink liquor. Both men and women dress like Maratha Kunbis. They are hardworking, hospitable, and orderly, but dirty, and the women are guarrelsome. They are fishers, husbandmen, and labourers. They worship the usual Brahmanic and local gods and goddesses. Their family deities are Khandoba of Jejuri, Bhavani of Tuljapur, and Bahiroba Mhasoba and Satvai whose shrines are in the Konkan. Their priests are Deshasth Brahmans who officiate at their marriages. Their religious guides are the slit-eared or Kanphate Gosavis, whom they call Bayas. For her first lying-in a girl generally goes to her parents' house. On the fifth day after the birth, on a grindstone in the lying-in room, the midwife places river sand, pieces of *nivdung* or prickly-pear, *rui* leaves, and the knife with which the child's navel cord was cut; she also lays near it cooked rice, pulse, and

mutton. On the door of the room she draws seven lines with a piece of charcoal and lays wet gram in front of the lines. In the evening five married men are asked to dine, and a fishing net is spread round the mother's cot to net the evil spirits that may try to go into the room to steal the child. The mother is impure for ten days. On the morning of the eleventh, her clothes are washed and the house is cowdunged. The mother sets five pebbles outside of the house, and lays rice pulse and cakes before them. Five married men are feasted. On the evening of the twelfth day the elder women of the house, in the presence of neighbour women, lay the child in a cradle and give it a name which is chosen by its parents or other elders of the family They cut a boy's hair for the first time between his sixth month and his third year. The maternal uncle seats the boy on his knee, cuts a few hairs, and puts them in a cocoa-kernel, and lays the kernel before the house gods. The barber shaves the boy's head leaving only the top-knot. The cocoa-kernel and the hair are thrown into a river or a pool. They marry their boys between sixteen and twenty-five and their girls between ten and sixteen. Except that at the marriage time they make the boy and girl stand face to face in bamboo baskets, their marriage customs are the same as those of Kunbi Marathas. They burn their dead. The pebble or life-stone, with which at the pile the water jar is broken, is tied in a piece of cloth near the deceased's door for ten days and is then thrown into water. So long as the life-stone is tied to the door the family consider themselves in mourning. On the third day the chief mourner goes to the burning ground, sprinkles milk curds butter cow's urine and dung on the ashes of the dead, and throws the ashes into water. He sprinkles cowdung and water on the spot where the body was burnt, and places two dough-cakes where the head lay and one where the feet lay, he leaves flowers and turmeric, bathes, and goes home. He rubs the shoulders of the corpse-hewers with oil and feasts them. On the tenth day he goes to the burning ground with eleven dough balls, throws ten in water, and sets the eleventh, for crows to eat. He does not return home till a crow has touched the ball. On the thirteenth, castefellows are asked to feast on fish mutton and cakes, and they present the chief mourner with a white cloth which he folds round his head and goes to the temple nearest his house. Bhois hold caste councils. A few send their boys to school, but as a class they are poor and show no signs of rising.

KOLIS.

Kolis are returned as numbering 42,829 and as found over the whole district. Most of them cannot tell whether they are Kolis or Kunbis and if Kolis to what class of Kolis they belong. They are divided into

Chumbles, Konkan, and Akarmase Kolis, who eat together but do not intermarry. The following particulars apply to Konkan Kolis. They say they came from the Konkan about seventy-five years ago. Their surnames are Chavhan, Dalvi, Gaikvad, Kamble, More, and Vaghle. The names in common use among men are Ganpati, Krishna, Maruti, and Rama; and among women Bhagu, Chima, Dhondi, and Lakshmi; people having the same surname and quardian or devak cannot intermarry. They look and speak like Kunbis and resemble them in house dress and food. They are husbandmen, labourers, houseservants, gardeners, and water-drawers. They are fruit vegetable and grass sellers and tile-turners. The women and children help the men in the work. Their chief family god is Khandoba of Jejuri; and they also worship Bahiroba, Kalkai, Janchi, and Jokai. Their priests are Deshasth Brahmans whom they show great respect. They make pilgrimages to Alandi, Benares, Jejuri, Pandharpur, and keep the usual Brahmanic fasts and feasts. Kolis marry their girls between twelve and sixteen, and their boys before they are twenty-five. When a man thinks it is time his son should marry he looks for a suitable girl. When he has found a good match for his son he sends an elderly person to the girl's house, and when they agree the boy's father goes to the girl's and tells her parents that his relations approve of the match. Then, some elderly persons of the boy's and girl's family go to an astrologer and giving him the boy's and the girl's names ask him to choose lucky days for the turmeric-rubbing and for the marriage. The astrologer consults his almanac and names lucky days. After two or three days, the women of the boy's family go in the evening to the girl's with pulse, molasses, and betelnut and leaves, and, making over those things to the women of the house, ask the girl's relations and neighbours to come to the feast, and taking betel leaves and a little sugar lay them before the girl's house gods. Other betel leaves and sugar are kept ready and presented to the women of the boy's family according to the family rank or man. When the ceremony is finished pulse and liquor are served. A day before the turmeric-rubbing earthen jars are brought from a potter's, and marked with turmeric. On the turmericrubbing day the boy is rubbed with turmeric and bathed and told to bow before the house gods. A marriage porch is built in front of the house, turmeric is powdered and laid in a cup, and as the time named by the astrologer draws near a woman lights a lamp and sets it in a dish along with a cup containing turmeric powder, a box of redpowder, and a few grains of rice. Then a quartz or rice flour square is traced on the floor, a low wooden stool is set in the square, and mango branches are hung from one of the beams of the porch. Five women take grains of rice, sprinkle them on the lines which have been traced on the floor, and sing. The boy is seated on a stool, and near him a maid of honour

or *karavli*, generally his sister, and five married women rub him with turmeric. When the turmeric-rubbing is over they mark his brow with redpowder and stick grains of rice on the powder. The women guests wave a copper coin round the boy's head and give it to the musicians. Another square is traced in front of the house, and a handmill is set in the square, a flower is tied to its handle, and about half a pound of udid pulse is ground by married women. When they have ground the pulse the stone is taken outside and set in the booth, and the boy and is sister leave their seats. A quartz square is traced in one corner of the marriage porch, and three low wooden stools are set in a line. On the first stool the father sits dressed in a turban, waistcloth, and shouldercloth; on the stool to his left sits the mother, and next to her the boy. At this part of the ceremony the boy's father and mother are specially called varmavla and varmavli, that is the bridegroom's father and the bridegroom's mother. Then a married woman brings a plate with a lighted lamp, a box of redpowder betelnut and leaves, walnuts and almonds, and a few grains of rice, and sets them on the floor in front of the boy. She next brings one of the marked earthen jars from the house, fills it with cold water, and setting a cocoanut in the mouth of it, hangs it. in a coir sling to one of the posts of the porch in front of the mother. The Brahman priest touches the brows of the mother and father sticks grains of rice on their brows, and repeats verses, tying together the hems of the father's and mother's clothes. A woman brings a hatchet or kurad, a pulse cake or vada, and wafer-biscuits a papad, and ties them to the hatchet; the father lays the hatchet on his shoulders and walks outside of the booth followed by his wife, who carries the plate with the lighted lamp. The father cuts a branch of a fig-tree or *umbar*, and sets, it in the ground in the booth. The Brahman priest repeats texts, rube the branch with turmeric and redpowder, and asks the father also to rub it. When the rubbing is over the father mother and son go into the house, the priest retires, and the guests are feasted. All this is done both at the girl's and at the boy's. The next ceremony is the lap-filling or oti-bharan. In the evening a party of married men and women from the boy's take, in a bamboo basket the ornaments which have been made for the girl, a cocoanut, two betelnuts and leaves, five dates and almonds, a plate with a lighted lamp on it, and a cup of turmeric, and go to the girl's house with music. At the girl's the men are seated in the booth and the women are seated inside the house. Then the men tell the girl's father that they are come to fill the bride's lap and he asks them to fill it. The girl is seated in a square and rubbed with the turmeric or halad that was brought from the boy's. A lucky thread or mangalsutra is tied round her neck, she is decked with ornaments, and her lap is filled with articles brought from the boy's house. The guests are served with

sugar and beteinut by the boy's and girl's fathers and they retire. Early next morning at the boy's in the porch a square is traced. At each corner of the square a water-pot or tambya is set, filled with water, and the boy is seated on a low wooden stool in the middle. Four or five married women surround the boy and behind him stands his sister holding her hands together with upturned palms. The five women sing songs and pour water on to the girl's palms from which it keeps dropping on the boy's head. This goes on till the water in the four pots is finished when the boy puts on a fresh cloth and goes into the house followed by the women. In the house five squares are traced on the floor and in one of the squares a low wooden stool is set and the boy is seated on it. Wreaths of flowers are wound round a copper frying pan, betelnuts and leaves are laid in the pan, and it is set in front of the boy. A piece of flax and some betel leaves are tied to a small stick, and the five women, grasping the stick and singing songs, thrust it into an oil cup and touch the floor, the pan, some article in the name of the family god, and lastly the boy's head. A square is traced and a wooden' stool is set in the middle Of the square and the boy is seated on the stool. A barber sits facing the boy and asks a married woman to rub the boy's brow with redpowder and stick grains of rice on the powder. After she is done the barber shaves the boy's head. After the boy's head is shaved, the women quests wave a copper coin ($\frac{1}{4}$ a.) round the boy's head, and give it to the barber who retires. Five married women, taking four earthen pots, go to the nearest well and with music draw water. Another woman traces a square in the booth, and the women, bringing the four water-pots from the well, set one of them at each corner of the square. A cotton thread is passed several times round the necks of the water-pots and a grindstone is set in the middle of the square. While the five women sing, the boy's sister, followed by the boy, walks five times round the square. Then the boy sits on the grindstone in the middle of the square and is bathed while women sing. Except the shaving, all these ceremonies take place at the girl's house with the same details. The boy is next decked with jewels, and a silk-bordered waist cloth, a coat, and a turban, and adorned with wedding ornaments. A horse is brought to the porch door, square is traced in front of the horse, and a cocoanut is set in the square. The boy is taken before the house gods and after bowing to them bows to the horse before mounting it. When the procession draws near the girl's they halt. The boy's family priest goes on alone and sits on the girl's veranda and warns the girl's, people not to lose time in meeting the bridegroom as the lucky moment is near. Meanwhile the procession moves on. When it reaches the girl's house the girl's brother takes a cocoanut in his hands and goes to meet the bridegroom. The brother is lifted up close to the bridegroom, he

squeezes the bridg room's ear, and they embrace. The bridegroom alights, cuts with a knife a string which has been long across the doorway, walks into the booth, and is seated on a low wooden stool. The girl's father comes with a pot of water and another brings a pot of oil and the father touches the boy's feet with the two pots and presents him with a waistcloth. The gents take their seats and a woman draws a square and in it lays a bell-metal plate on which the boy is made to stand with his face to, the east. The astrologer marks the time with the help of a water-clock, which is a metal cup with a hole in the bottom floating in a jar of water. Another bell-metal plate is set in front of the boy and a cloth is held before him. The girl is brought in and made to stand in the second plate. The guests stand round the boy and girl with grains of rice in their hands, and the priest repeats marriage verses. At the lucky moment the priest stops, and throws grains of rice over the heads of the boy and girl and they are husband and wife. The guests throw grains of rice over the boy's and girl's heads and the guests clap their hands. The boy and girl are then taken to bow before the house gods, and after receiving packets of betel-nut and leaves the guests retire. The boy and girl, with near relations who have been asked to dine, feast, and tying the hems of their garments together, the boy takes his bride to his house At the boy's house they bow before the house gods and return to the girl's. Next morning the boy and girl play a game of odds and evens with betelnuts and feed each other. A dinner is given, and after the dinner is over the boy takes his bride and goes in procession to his father's. When they reach the house, the boy's sister shuts the door from within, and when the boy asks her let him in, she refuses until he promises to give his daughter in marriage to her son. The guests retire, and the marriage ceremonies end with a feast. The boy and girl are led upstairs and their marriage ornaments are taken off and tied to a beam Then the boy and girl call one another by their names and come downstairs. The marriage gods are bowed out, the marriage porch is pulled down, and the marriage is over. When a girl comes of age she is seated by herself for three days. On the fourth day the boy's father presents her with a new robe and bodice and the girl's parents present the boy with a new turban and sash After the girl has put on her new clothes the boy's mother fills her lap with grains of rice and a cocoanut, and the boy and girl, with the hems of their garments tied together, bow before the house gods. As many of the elders of both houses as may be present bow before the gods. A feast of sweet cakes or *puranpolis* is held when only the near relations and friends of both the boy's and girl's houses are called, and, after they have dined, the boy and girl are shut in a room and the guests retire. On the fifth day after the birth of a child a grindstone is placed in the mother's

room and over it is laid a blank sheet of paper, a pen, some ink, and the knife with which the child's navel cord was cut, and worshipped by one of the elder women of the house. Close to these articles either bread and split pulse or mutton and liquor are laid over the grindstone, and dough lamps are set and lighted near the four feet of the cot on which the mother is lying. The house-people and any near relations who have been called are asked to dine, and the mother and midwife keep awake during the whole night. On the sixth day the stone slab is again worshipped, bread and split pulse are offered to it, and, except the blank sheet of paper, the pen ink penknife and grindstone are thrown into the river. A woman is held; to be unclean for ten days after child-birth. On the eleventh, the house is cowdunged, the clothes and the cot are washed, and the mother and child are bathed. On the twelfth, the mother lays five pebbles outside of the house, and worships them with flowers, and hangs a paper cradle over the pebbles. Frankincense is burnt before them and a goat is slain. A feast is held and in the evening neighbour women lay the child in a cradle, and give it four or five names. The first name that is mentioned becomes the child's name; the rest are known as palnyatlinave or cradle-names. A song is sung and the guests retire each with a handful of wet gram and a pinch of sugar. A boy's hair is cut for the first time when he is more than a month and less than two years old. At the hair-clipping the goddess Satvai is worshipped. A goat is killed and its head is buried in front of the goddess. The ceremony ends with a feast to which the barber is asked and this is the only payment he gets. The hair-clipping ceremony is performed either in the house or in the outlying lands of the village. When a Koli dies the women wail and the friends and relations busy themselves in preparing a bier. The corpse is laid on the bier, raised on the shoulders of four male relations, and the chief mourner walks in front of the bier, carrying in a rope sling an earthen jar with fire in it. When they reach the burning ground, the mourner lays the body on the pile and sets fire to it. After the body is burnt the mourners bathe and go to their homes. They mourn ten days. At the end they present the priest with money, metal vessels, an umbrella, and a pair of shoes, and all the members of the dead man's family bathe and the mourning is over. A Brahman sprinkles a mixture of cow's urine, dung, milk, butter, and curds on the mourners and they are pure and feast the caste. They hold caste councils. A few send their boys to school for a short time, but as a class they are poor and show no signs of rising.

LABOURERS

Labourers included seven classes with a strength of 5761 or 0.68 per cent of the Hindu population. The details are:

POONA LABOURERS.

| CLASS. | Males. | Females. | Total. | CLASS. | Males. | Females. | Total. |
|--------------|--------|----------|--------|---------|--------|----------|--------|
| Bhandaris | 76 | 56 | 132 | Lodhis | 206 | 161 | 367 |
| Chhaparbands | 101 | 79 | 180 | Rajputs | 2033 | 1760 | 3793 |
| Kamathis | 576 | 611 | 1187 | Raddis | 14 | 16 | 30 |
| Kalals | 40 | 32 | 72 | Total | 3046 | 2715 | 5761 |

BHANDARIS.

Bhandaris, or Distillers, are returned as numbering 132 and as and in Haveli, Bhimthadi, Maval, Khed, and Poona. They are divided into Kites and Sindes who do not eat together or inter-marry. The Kites are middle-sized, fair, and generally good-looking. They speak Marathi both at home and abroad. They generally live in houses with mud and brick walls and tiled roofs, and have earthen and metal vessels, blankets, and guilts. Their staple food is millet rice and vegetables, and they do not object to eat fish or the flesh of goats sheep and fowls or to drink liquor. They dress like Marathas, and are sober, thrifty, hospitable, and orderly. They are in the service of liquor-contractors as shopmen and sell bevda, arrak, masabdar, and other country spirits at 1s. 6d. (12 as.) and rashi at 1s. 3d. (10 as.) the quart. They are paid £1 10s. (Rs. 15) a month Besides as liquor-sellers, they work as husbandmen and labourers. They are Hindus and worship the usual Brahmanic gods and goddesses, and in their religious and social customs do not differ from Maratha Kunbis. Most of them have come from Bombay and go to Bombay when they wish to get married. They settle social disputes at meetings of the castemen. They do not send their boys to school. They are poor. Within the last few years they have given up their hereditary calling of palm-juice drawing and become labourers.

CHHAPARBANDS.

Chhaparbands, or Thatchers, are returned as numbering 180 and as found in Haveli and in the city of Poona. They originally came from Hindustan and are Rajputs, but on account of their calling they are called Chhaparbands. They say that about a hundred and fifty years

ago, about a hundred of them including women and children came to this part of the country in search of work. They have no subdivisions and no surnames. The names in common use among men are Bhavsing, Kesarsing, and Mansing; and among women Ganga, Bhagirthi, Chandra, and Parvati. They look like Pardeshis. The men wear the top-knot and moustache, but not whiskers or the beard. The women tie the hair in a braid or veni and leave it hanging down the back. They rub their brows with red-powder and neither use false hair nor deck their heads with flowers. Their home tongue is Hindustani, but they speak Marathi with strangers. They live in houses with mud walls and thatched or tiled roofs. Almost all keep dogs, and few have cattle or employ servanants. Their women take no part in thatching, but boys begin to help at fifteen. Their staple food is rice, millet, and wheat bread, vegetables and pulse. They eat fish and flesh and drink liqugor. The men wear the Maratha turban, waistcloth, waistcoat, and shouldercloth, and the women a bodice, a petticoat or ghagra, and a robe rolled round the petticoat and one end drawn over the head. The women wear green or red but never black robes, and their ornaments are like those of Marathas. They are guiet, hardworking and orderly. They make thatch of saga or teak leaves, hay, and bamboo. Their women sell firewood and cowdung cakes. They are Hindus, and worship the usual Hindu gods and goddeses. Their chief object of worship is Bhavani, whoso image they keep in their houses. Their priests are Pardeshi Brahmans, who perform all their religious ceremonies. Their holidays are the same as those of other Hindus. Their women in child-birth are not allowed to lie on a cot. On the fifth day a married woman dips the palm of her right hand in a mixture of rice flour and water and stamps a mark on the wall in the mother's room and lays rice and whey curry before the mark. On the twelfth day they name the child, the name being given by the child's father, and the mother's lap is filled with five plantains or any other fruit. On a Tuesday after the twelfth, they worship the goddess Satvai outside of the house or garden by placing five pebbles in a line, and offering them cooked rice and vegetables. They clip the child's hair when it is between two and five years old, offer a goat and hold a feast. They marry their boys between twelve and twenty-five, and their girls between ten and twenty. They marry their widows, and practise polygamy but not polyandry. They burn their dead and settle social disputes at mass meetings of the caste. Their calling is declining as Government does not allow thatched roofs to remain during the dry season. They do not send their boys to school, and are a poor people.

KAMATHIS.

Kamathis are returned as Numbering 1187 and as found over the whole district except in Junnar, Indapur, and Purandhar. They seem to be of Telugu origin and are said to have come from the Nizam's country about a hundred years ago. They say that when they came the Peshwa gave them rent-free lands. The names in common use among men are Ayalu, Erappa, Gangaram, Krishna, Narsappa, Phakira, Posheti, and Yellappa; and among women, Amalubai, Akubai, Jamanibai, Saitri, and Yalubai. The honour-giving appa or father is added to men's names and bai or lady to women's names. The commonest surnames are Dasarkulu, Kutolu, Mandactalu, Pilaleli, Pautkudolu, and Totoladu. Persons having the same surname can intermarry. They form one class. They are dark, tall, and well-made. The men shave the head except the top-knot, and the face except the moustache. They wear whiskers but not the beard. They live in untidy middle-class houses one or two storeys high, with brick walls and tiled roofs. Their house goods include boxes, cradles, cots, carpets, blankets, mats, and metal or earthen vessels. They have no house servants, but keep cattle and pet animals. They are moderate eaters and good cooks. Their favourite dishes are sour, and their staple food is Indian millet bread, pulse, and pot herbs. They do not bathe or worship their gods every day but sit and eat their morning meal as soon as they return from their work. They bathe every second or third day, and worship their gods on all lunar elevenths or ekadashis. On holidays and when they can afford it, they eat the flesh of sheep, goats, poultry, deer, and fish, and drink liquor often to excess. They also drink bhang or hemp-water and eat opium and smoke ganja or hemp-flowers and tobacco. The women tie their hair in a knot at the back of the head; they wear neither flowers nor false hair. The dress both of men and women is dirty and careless. The men wear a waistcloth, a loincloth, a coat, a Maratha turban, and a pair of shoes. The women wear the robe with the skirt drawn back between the feet in Marathi fashion. Of ornaments inen wear the earrings called bhikbalis and finger rings; and women the nose-ring called nath, the necklace called *vajartika*, the wristlets called *gots*, and the toerings called jodvis. Kamathis as a class are dirty in their habits, hardworking, treacherous, irritable, and vain. Most are masons and house builders, some make cigars, and others work as labourers. Boys of eight begin to help their fathers. Women mind the house and work as labourers. Masons work from six to eleven, go home to take a meal, are back at work by two, and work till six. They are busiest between November and June. On personal security they can borrow 10s. to £5 (Rs. 5-50) at twelve to twenty-four percent a year. They rank with Marathas, and eat from Brahmans, Marathas, and Lingayats. They are religious, worshipping Bahiroba, Bhavani, Khandoba Lakshmi, Narsoba, Shankar, Virabhadra, and Vyankoba. They make pilgrimages to Vithoba of Pandharpur, Dnyanoba of A'landi Bhavani of Tuljapur, and Vyankoba of Giri. They worship all village, local, and boundary gods. They keep the usual Brahmanic holidays and fasts. Their priest is a Telang Brahman, whom they highly respect and who officiates at all their ceremonies. They ask him to dine, wash his hands and feet, rub his brow with sandal paste, present him with flower garlands and nosegays, and bow before him. He tells them to be just in their dealings, to give to the poor, and to read good books. When ho has finished his dinner he is given 1s. to 10s. (Rs. 1-5) in cash and takes his leave. When the Teacher dies they choose some other pious man as his successor. They believe in witchcraft evil spirits and soothsaying. When a person is possessed they make vows to their gods and fulfil them soon after the recovery of the sick. Early marriage polygamy and widow-marriage are allowed and practised, polyandry is unknown. When a woman is brought to bed a midwife is called. She digs a pit or mori to hold the bathing water and cuts the child's navel cord. Turmeric paste and vermillion are scattered the front of the pit, and the child and the mother are bathed. The navel cord is put in an earthen vessel and buried in the pit. For three days the child sucks one end of a rag whose other end rests in a saucer of honey, and the mother is fed on rice and clarified, butter. On the fourth day the mother begins to suckle the child. On the fifth a stone slab or pata is placed near the bathing pit, a square is marked on the slab with lines of rice, and a silver image of Satvai is set in the square, a lemon is set at each corner of the stone slab and a fifth lemon and a cocoanut are laid be fore the image. One of the house women lays before the goddess turmeric powder, vermillion, cotton thread, rice and pulse, or boiled mutton if the mother is a Vaishnay, as they slaughter a goat in honour of Satvai. Female friends and relations are feasted, a shoe is laid under the child's pillow, and women keep watch till morning. The impurity caused by the birth lasts ten days. On the twelfth women neighbours meet at the house, set five wheat-floor cakes under the cradle which is hung with ropes from the ceiling, and turmeric powder and vermillion are handed round. The child is named, and the women guests are feasted. After dinner they are given rolls of betel leaves and withdraw. After the fourteenth day Satvai is again worshipped. Five stones are placed together and turmeric powder and vermillion are laid before them. A goat is killed if the mother is a Vaishnay, and friends and relations are feasted. The mother puts on new bangles and from that time is allowed to follow her every-day housework. The boy's hair is cut for the first time when he is two years old. He is seated on his father's lap and his head is shaved by the village barber who receives 3/4d. to 11/2d. (1/2-1a.). Boys are married between ten and twentyfive, and girls between two and twelve. The girl's father plans the match and asks the consent of the boy's father. When they agree to the terms, the boy's father visits the girl and presents her with a robe and bodice. Her brow is marked with vermillion, and a packet of sugar is placed in her hands. This is called the *magani* or asking. One to five days before the day fixed by the priest for the marriage, the bride is brought to the bridegroom's and rubbed with turmeric paste. The bridegroom is rubbed after the girl, and both are bathed in warm water. The bride is given a robe and bodice and her brow is decked with a network of flowers. Three earthen pots are brought into the boy's house, two are set in front of the boy and girl and the third behind them. All the pots are filled with rice mixed with vermillion, flowers turmeric paste and V capital are laid before them, and they are made devaks or marriage quardians. In the booth before the boy's house a marriage altar or bahule is raised but no pots are placed near it. No quardian or *devak* is installed at the bride's. When the lucky time draws near the couple are made to stand face to face on the bahule or altar with a curtain held between them. The priest, a Telang Brahman, repeats texts and vermillion-tinged rice is thrown over the couple. Marriage threads are passed through two silver rings and tied to the right wrist of the bridegroom and the left wrist of the bride. The lucky thread is fastened round the bride's neck. One man takes the bride and another the bridegroom on his shoulder and they dance in a circle scattering redpowder. When the dance is over the boy's and girl's garments are knotted together and they bow before the family gods in the house. The bridegroom's sister or sister-in-law unties their clothes, the Brahman priest receives 2s. (Re. 1) from the father of the bridegroom, betel is served, and the guests withdraw. For four days friends and relations are feasted. On the fourth the bride and bridegroom receive presents of dresses from their fathers-in-law, and their brows are decked with palm-leaf brow-horns or bashings. In the evening of the wedding day the *varat* or bridegroom's procession, with music and a band of friends, starts from the boy's house, moves through the streets, and returns. The priest comes, the boy and girl untie each other's marriage wristlets, and, together with silver rings, the wristlets are thrown into an earthen vessel filled with water. The boy and girl are told to pick them out, whoever is quickest is applauded and will be ruler. At night a gondhal dance is performed, and the marriage is over. When a girl comes of age she sits apart for three days. On the fourth she is bathed, a cocoanut, and rice are laid in her lap, she and her husband receive presents of dress from their fathers-in-law, and friends and relations are feasted. They either bury or burn their dead, and except that they hold no death-day feasts they follow all the rites observed by Marathas. Among them a death costs

12a. to £1 (Rs. 6-10). They have a strong caste feeling and settle social disputes at caste meetings. Breaches of caste rules are punished by fines of 2s. 6d. to £6 (Rs.1¼-60). They send their boys and girls to school till they learn Marathi reading and writing. They are pushing, ready to take to new employments, and fairly off.

KALALS.

Kalals, or Distillers, are returned as numbering 72 and as found in Bhimthadi, Haveli, Khed, Maval, and in the city and cantonment of Poona. They say they came to the district from Hindustan sixty or seventy years ago. They have no subdivisions. Their surnames are Kashpuri, Longha, and Nagarba. The names in common use among men are Gangadin, Hirasing, Ramdin, Rambakas, and Shivparsad; and among women Ganga, Parbati, and Radha. They look and speak like Pardeshis and their staple food is wheat, rice, butter, and occasionally fish flesh and country liquor. The men dress like Marathas, and the women in a petticoat and open-backed bodice and upper scarf. They sell bevda, arak, and rashi spirits, the first two at 1s. 6d. (12 as.) and the rashi at 1s. 1d. (8 2/3 as.) the quart bottle. They estimate their profit at about one-eighth or fifteen per cent (1 pint in 1 gallon) and sell four to eight gallons a day. Their shops are open from 6 A.M. to 9 P.M. Their women take no part in the liquor-selling, but the boys begin to help at ten or twelve. Some serve as shopboys to Parsi and other liquor-sellers and are paid 10s. to 16s. (Rs.5-8) a month. They do not know that they belong to any sect, and have house images of Bhavani, Krishna, Ram, and Mahadev. They keep the usual Hindu fasts and feasts and their priests are their own Pardeshi Brahmans. They make pilgrimages to Alandi, Benares, Pandharpur, and Tuljapur. They have no headman and settle social disputes at meetings of the castemen. They send their boys to school. They complain that their calling has declined since the introduction of the liquor contract or makta system.

LODHIS.

Lodhis are returned as numbering 367 and as found in Bhimthadi, Haveli, Khed, and Poona. They say they belong to Hindustan and Aurangabad and came to Poona about a hundred years ago. Their surnames are Dhatariya, Dhanariya, Papiya, Morchariya, and Shridhar. The names in common use among men are Girdhari, Govind, and Hiraman; and among women Bhagaya, Lachaya, Nandu, Paru, and Tejiri. They look like Pardeshis; the men wear the top-knot, moustache, and whiskers but not the beard. The women tie the hair in a knot behind the head; they do not use false hair or adorn their heads

withflowers. Their home tongue is Hindustani, but they speak Marathi out of doors. They live in houses of the better sort one or two storeys high with walls of brick and tiled roofs, and keep cows, buffaloes, horses, dogs, and parrots. Their house goods are earthen and metal vessels, boxes, cots, bedding, carpets, and cradles. They keep servants and pay them 4s. to 6s. (Rs. 2 - 3) a month with food. Their staple food is rice, wheat, millet, Indian millet, vegetables except onions, butter, oil, spices, fish, and the flesh of goats and sheep, but not domestic fowls. They drink both country and European liquor. The men dress either like Marathas or like Deccan Brahmans in a waistcloth, loincloth, coat, waistcoat shouldercloth, a Maratha or Brahman turban, and shoes or sandals. Their women wear a petticoat and an open-backed bodice and draw a short robe or phadki over the upper part of the body and the head. They are hardworking; hottempered, thrifty, and hospitable. They are moneylenders, husbandmen, labourers, and firewood charcoal and cowdung-cake sellers. Their women and children help them in their calling, and earn 3d. to 6d. (2-4as.) aday, hawking cowdung cakes and firewood. The men earn double as much as the women, and those who own firewood stores make £5 to £10 (Rs. 50-100) a month. They consider themselves Kshatris. In religion they are Vaishnavs, but their family deities are mothers or goddesses father than gods. The house deity of most is the Tuljapuri of Tuljapur, and of a few the god Balaji. Their priests are Pardeshi Brahmans to whom they show great respect. They keep the usual Brahmanic fasts and feasts. They believe in sorcerv, witchcraft, soothsaying, omens, and lucky and unlucky days. On the fifth day after a child is born the Lodhis smear with cowdung a spot in the lying-in room and on it place two copper anklets or vales, a piece of black thread, and a cap and frock of Gujarat Kharva cloth. They light a dough lamp before these articles, and lay flowers cooked rice and curds before them. After dinner the babe is dressed in the cap and frock and the copper anklets are put on its feet. On that night none of the doors and windows are allowed to be closed but are kept wide open. The guests remain all night and do not leave till after dinner next day. They consider the mother impure for ten days, and at the end of the ten days wash the whole house. An hour or two after a hole is dug in the yard near the house and on the edge of the hole are laid four pieces of firewood and an earthen jar full of cold water. The mother goes out and worships the jar, and her father presents her with a new robe and bodice. A few days after, within a month from the date of the birth of the child, the mother goes some distance into the village waste land oriangal, and worships five pebbles, and puts new glass bangles round her wrists and returns home. The hair-cutting ceremony is performed at any time before a child is three years old.

They take the child to a river and after the hair is cut put it in a dough ball and throw it into the water. The ceremony ends with a mutton feast. They marry their girls before they are sixteen and their boys before they are twenty-five. Their marriage-quardian or devak is five pinches of earth picked from five placed, which they bring home and lay near the house gods. A few days before a marriage the village astrologer writes the date of a lucky day for the marriage on two pieces of paper, a silver two-anna piece is rolled in each, and they are folded and given to the boy's and girl's fathers. The boy's father hands his packet to the girl's father saying Shri Ramehandraji's varath ali, savadh raha, that is Shri Ramchandraji's bridal has come, Beware. The girl's father gives his packet to the boy's father saying Basing balane lagnas va, that is' By the might of the brow-horn come to the marriage. Each takes the packet and places it among their house gods, and the day ends with a feast at both houses. Next day women are asked to dine, and daring the whole day and night, busy themselves making cakes. called telchias. On the marriage day from the boy's house are brought to the girl a shoe, some henna or mendi, needles, vermillion or hingul, a robe, a petticoat, a bodice, a yellow sheet, and a frock, and they are laid before the house gods. The girl's mother goes to the temple of the goddess Shitaladevi and worships her singing songs. The boy's sister goes home and after rubbing the turmeric goes again to the girl's house. When she reaches the girl's house the girl's sister rubs the girl with turmeric and the boy's and girl's relations dine together. The girl's father presents the boy's sister and his own daughter with a robe and bodice, and they return to their houses. The boy's maternal uncle gives a dinner at the boy's house. The uncle comes leading a bullock with a bag of rice on its back, twenty-five earthen jars, and two flower-pots. Redpowder is rubbed on the bullock's brow and garlands are hung from its neck. One of the party walks into the house carrying the grain bag followed by another who sprinkles water after him as he walks. The bag is laid in front of the house gods. The boy's father plants a palas branch about three feet long in his own marriage porch and another in the girl's marriage porch. He cuts four holes in each branch, fixes a ladle or pali in each hole, and fills the ladles with oil and lights them. The twenty-five earthen jars are piled near the house gods. The boy is dressed in a new waistcloth, coat, turban, and marriage brow-horn or bashing, he is seated on a horse, and taken in procession to the girl's. When the bridegroom reaches their house the girl's sister takes the girl in her arms and makes her throw five balls of rice and molasses at the boy's marriage ornament. The boy is taken off the horse and the girl's father touches his brow with redpowder and presents him with a new waistcloth and turban. Each of the boy's near male relations is

presented with a waistcloth and the boy is taken and seated in a neighbouring house on a cot, the other guests sitting on blankets round him. A dish of vermicelli or shevaya is brought for the boy, but it is all eaten by other children, the boy getting none of it. The girl's brother's wife comes with a wooden pestle, and asks the boy to help her in pounding rice. The boy touches the pestle and the girl's brother's wife stands with the pestle repeating a song. When the boys have done eating the vermicelli the bridegroom puts $1\frac{1}{2}.d$ (1 a.) into the dish and except the boy and girl the guests all dine and take a nap. At daybreak the five ladles in the palas branch are lighted and five earthen jars are placed near them one of which is filled with cold water. In front of the jars the priest traces a square made with lines of wheat flour and red and yellow powder, and the boy and girl sit on the square close to each other, the girl to the right of the boy. Then the boy's relations present the boy with clothes and money. This is called the giving away of the bride or kanyadan. The boy and girl go six times round the palas branch, and stopping ask the guests if they should take the last or seventh turn. The guests say 'Take the turn,' and as soon as the turn is completed the priest utters the word Savdhan or Beware, and the boy and girl are husband and wife. In the evening a feast is held. After the feast the boy goes to his house with the girl in a palanguin, himself walking on foot with the guests. When they reach the boy's house curds and cooked rice are waved round their heads and the boy's father presents them with a couple of rupees, rice is piled in a heap, and the boy kicks the heap five times with his right foot. On the following day a feast is held at the boy's house and the marriage wristlets are untied. When a girl comes of age she is seated by herself for four days. On the fifth day the boy's finger ring is hid somewhere in the house, and the girl is given four months to find it. When she has found it she tells the house-people and on that evening the boy and girl are left together in a room and she puts the ring on the boy's finger. If she fails to find the ring she is allowed to try again at the end of four months. When a Lodhi dies cold water is poured on the body in the house where it lies. The body is taken to another part in the house, the spot is cowdunged, and the body is again laid on the spot where he breathed his last. It is dressed in the usual clothes and laid on a bier. It is carried on the shoulders of four men, the chief mourner walking in front carrying a jar with burning cowdung cakes. About half-way to the burning ground the bearers stop and set the bier on the ground and lay two pebbles near the corpse's head. The bier is lifted and the chief mourner hands the firejar to another of the party, and, until they reach the burning ground, keeps bowing and laying himself at full length on the ground. At the burning ground the fire-jar is dashed on the ground, and when the pile

is raised the body is laid on it and set fire to by the chief mourner. When it is half burnt, an earthen jar containing butter is thrown on the corpse's head, and the mourners bathe and return to the deceased's house. When they reach the house, the widow takes off all her ornaments and piles them in a heap, and each of the mourners sprinkles water over them. The widow never again wears ornaments. After the mourners have gone to their homes the chief mourner and his family dine. The family of the deceased mourns ten days. At the end of the ten days the chief mourner goes to the burning ground, throws the ashes into water, has his head and moustache shaved, cooks rice a vegetable or two and oil-cakes or telchias, and serves them on a leaf plate. After the crows have touched the cakes the chief mourner bathes and returns home. On the thirteenth day a caste feast is held, the chief mourner is presented with a a white turban, and he is free to attend to his work. They have It caste council and decide social disputes at meetings of the castemen. Breaches of caste rules are punished with fine which varies from 3d. (2 as.) to a caste feast. If an offender cannot pay a fine he stands before the council with joined hands with their shoes on his head. They send their boys to school, and as a class are well-to-do.

RAJPUTS.

Rajputs, better known as Pardeshis or Upper Indian Hindustani speakers, are returned as numbering 3793 and as found in all parts of the district and especially in the town of Poona. They have no tradition of their origin, and say that they lived formerly in Allahabad, Cawnpur, Benares, Delhi, and other parts of Upper India and came to the Deccan within the last century or century and a quarter, generally when their native country was troubled by famine. They are of two family stocks or *gotras* Bharadvaj and Mahirao. Persons belonging to the same family stock cannot intermarry. Their commonest surnames are Ajmode, Bagale, Banasi, Byas, Chavan, Gaval, Kachchhave, Rajekvar, and Suraj. Families bearing the same surname intermarry. The names in common use among men are Bapusing, Bhagyansing, Guradalsing, Kasansing, and Ramsing; and among women Jamna, Radha, Sundar, and Thagaya. Their home tongue is Hindustani. They are stout, wellbuilt, tall, and hardy with sallow skins. The men shave the head except the top-knot and a lock over each ear, and their face except the eyebrows, moustache, and whiskers. The face hair as a rule is thick and some of them grow long beards. They mark their brow with a circle of sandal pasts. They live in middle-class houses one storey high with walls of brick and tile roofs. They have generally copper and brass cooking vessels, and earthen vessels for storing grain. They own cattle

and keep servants. They are great eaters and are fond of sweet and pungest dishes. Their staple food is wheat, rice, pulse, millet bread, butter, vegetables, and relishes or chatnis. They also eat animal food, goats, hare, deer, and fish, and use intoxicating drinks and drugs on Tuesdays, Fridays, and Sundays. They consider themselves Kshatryas, and do not eat from the hands of any Deccan Hindus. They bathe every day and worship their family gods before they take their meals. The men wear a tight-fitting waistcloth reaching the knee, a coat, a waistcoat, a Maratha turban or headscarf, and sometimes sandals. The women tie their hair in a knot behind the head or let it hang in braids down the back. They rub their brows with redpowder and dress either like Marathas in the full Maratha robe and tight-fitting short sleeved and full-backed bodice, or in a petticoat and open-backed bodice with a short sash or *phadki* drawn over the upper part of the body and the head. They wear no false hair and no one but girl adorn their hair with flowers. They are clean, neat, strong hardworking, and honest, but easily provoked and fond of show Their hereditary calling is soldiering or sipahigiri. Lately they have taken to tillage, labour, or houseservice, to grain-dealing and to Government service as messengers. The grain-dealers buy tur pulse in the Poona market, moisten it, dry it in the sun for five days or a week, grind it coarsely, separate the husk from the grain and sell the grain at about 4s, the man of forty pounds. The husk is bought by milkmen at 1s. to 1s. 3d. (8-10 as.) the palla, and the chun or coarse bran is sold at 4s. to 12s. (Rs. 2-6) the palla. The women help in drying the pulse and mind the house. Their average monthly profits are estimated to vary from £1 10s. to £2 10 (Rs. 15 - 25). They are a religious class, and employ Deshasth and other Brahmans to officiate at their marriages, deaths, and other ceremonies. Besides their family gods they worship local and village gods. They make pilgrimages to Alandi, Benares Tuljapur, and other sacred places. They fast on all lunar eleventhas or ekadashis, the nine nights or *navaratras*, and Tuesdays or *Mangalvars*. When a woman is in labour a midwife of their own or of the Maratha caste is called. She cuts the navel cord and buries it near the bathing place, bathes the mother and child, and lays the bothon a cot. On the fourth day the mother begins to suckle the child Ceremonial impurity lasts ten days. On the fifth a little place in the mother's room is cleaned and cowdunged, and a bamboo arrow is laid on it with a sword or a knife. The women in the house worship the arrow, mark it with five lines of redlead, lay flowers vegetables and bread close to it, and keep awake the whole night. On the eleventh the house is cowdunged and the mother's clothes are washed. On the thirteenth friends and relations are asked to dine and in the evening the child is named and cradled. Sugar betelnut and leaves are handed round and the guests leave. At

some time between a boy's third month and his third year, his hair is cut for the first time. The child is seated in its mother's lap and the hair is cut by the barber who is paid 6d. (4 as.). Uncooked rice and pulse are given to a man of the caste and relations and friends are treated to a dinner. Girls are married between eleven and eighteen, and boys between eighteen and thirty. The offer of marriage comes from the bridegroom's side. If the girl's father agrees, and the familystocks or gotras of the two fathers are different, an astrologer is asked to name a lucky day and preparations are made. Two or three days before the marriage day a mango post is set in the ground at the houses both of the boy and the girl, and an earthen vessel, whitewashed and filled with wheat, is tied to its top. The sister of the bridegroom bathes him, seats him on a low stool near the post, and rubs his body with turmeric paste. As much of the paste as is over is taken by married women with music to the bride, and she is rubbed by her sister. Next day the women of both families go to the potter's and each party fetches a vessel which they name Ganpati or spirit-lord, fill it with wheat, and worship it as the devak or wedding quardian. At eight on the third night the bridegroom is dressed in rich clothes, and, escorted by a company of friends, is seated on horseback, and brought to the bride's. His brow is adorned with a flower chaplet in Muhammadan fashion, and he holds a knife in his hand. On reaching the bride's, a cocoanut is waved round him and broken on the ground. He dismounts and is led to a place in the booth, where, along with the bride's brother, he has to worship a copper pot or kalash filled with water, resting on a square marked by lines of wheat flour or of quartz powder. When the pot has been worshipped the bride's brother washes the bridegroom's feet. Then the Brahman priest leads the bridegroom to a neighbouring house and girds him with a sacred thread. At the time named for the marriage, the bridegroom is carried to a seat in the booth, which has been made ready by setting two low stools in a square marked by wheat flour or by quartz powder and covering the stools with a piece of white cloth. The bride comes out and is seated close to the right of the bridegroom, Brahmans repeat lucky wedding hymns, kindle the sacred fire, and feed it with clarified butter. The bride walks round the altar six times, and, at the request of the guests, the bridegroom joins her in the seventh turn, and ties the lucky thread round her neck. The girl sits on her husband's left and the priest ties with a fivefold thread a small piece of turmeric round the right wrist both of the boy and the girl. Next day the people are feasted and the father of the bridegroom presents the bride with a suit of clothes. Her hair is divided into two plaits which are drawn back, twisted together, and fastened at the back of the head, and redpowder is strewn along the parting or bhang down the middle of her head.

Then with an escort of friends and with music the bride and bridegroom are taken either in a carriage or on horseback to the bridegroom's where married women take off their turmeric wristlets and the wedding Ganpati is bowed out. The whole ends with a feast. When a girl comes, of age no ceremony is performed. She goes to live with her husband as his wife from her sixteenth year, and is held to be unclean for three days in every month. When a Pardeshi Rajput dies he is bathed in hot or cold water and is dressed in a loincloth. The chief mourner has his face except his eyebrows shaved and prepares balls of wheat flour. The body is laid on a bier and tied fast to it with a piece of string or thread, and wheat balls are placed one in each hand and one on the stomach of the dead. On the way to the burning ground the bier is laid on the ground, a rice ball is left on the spot, and the bearers change places and go on to the burning ground. At the burning ground the body is again bathed, laid on the pyre, and burnt without further ceremony. When the pile is nearly consumed, the chief mourner stirs the fire with a pole and each of the funeral party throws in a cowdung cake and bathes. They go to the house of the deceased, and each puts a seed of black pepper in his mouth and goes home. On the third day the chief mourner goes to the burning ground with flowers, betel leaves, milk curds, butter, cowdung, cow's urine, and five kinds of sweet-meats. The cow's urine is poured over the ashes and they are gathered and thrown into water. The spot is cleaned and cow dunged and sweetmeats and flowers are laid on it. The family of mourners remain impure for ten days. On the tenth day ten wheat flour balls are made and worshipped. Nine of them are thrown into the river, and the tenth is left for the crows. The mourners wait till a crow has touched the balls, and then bathe and return to their homes. On the thirteenth a dinner is given to the caste people when the friends and relations of the chief mourner present him with a turban. In the latter half of Bhadrapad or September during All Souls fortnight, a mind-feast is held in honour of the dead. Pardeshi Rajputs form a separate community. They settle social disputes, which are commoner than among most Deccan castes according to the opinion of the majority of the castemen. Breaches of social rules are punished by a fine which takes the form of a castes dinner, and the authority of the caste decision is enforced by the threat of loss of caste. They send their boys to school from nine to fifteen. They complain of growing competition and falling profits are ready to take to new pursuits, and are likely to prosper.

RADDIS.

Raddis are returned as numbering thirty and as found only in Poona. [Raddi is said to be a corrupt form of Rotti a Kanarese word meaning the human arm. According to the story the founder of the tribe got the name Rotti the strength of his arms. They are a Telugu class and say they have come to Poona since the beginning of British rule. They are divided into Pakpak Radis is and Matmat-Radis, who eat together but do not intermarry. Their surnames are Ajalu, Bhoidi, Hamuratbu, Kanelu, Nayadu Pitlobu, and Rajlalu; people bearing the same surname do not intermarry. The names in common use among men are Ashannna Pochauna, Rajanna, Ramanna, Yalanna, and Yankanna, and among women Chinamma, Narsamma, Ponnamma, Rajamma, Shivammaand Yelamma. They look like Telangia and are dark, tall, and muscular. The men wear the top-knot, moustache, and whiskers, but not the beard. Their home speech is Telugu. Their dwellings are like those of other middle-class Hindus one are two storeys high. They keep goats, bullocks, and cows, and their house goods include earthen and metal vessels, boxes, cots, bedding coverlets, blankets, and carpets. Their staple food is millet, rice, wheat, pulse, and vegetables, and occasionally fish, mutton, and liquor. They eat the flesh of the hare and deer, of waterfowls and domestic fowls, of the wild boar, and of the *ghorpad* or inguana. They prefer sour dishes and are fond of tamarind. They give caste feasts in honour of marriages and deaths, and on Dasara Day in October offer a goat to the goddess Yellamma or Pochamma. They dress like Marathas in a loincloth, a waistcloth or short trousers, a coat or a waistcoat, a shouldercloth, and a turban folded in Maratha fashion. The women dress like Maratha women in a backed and short-sleeved bodice, and a robe the skirt of which they pass back between the feet and tuck into the waistband behind. They tie their hair in a roll at the back of the head and use false hair and adorn their heads with flowers. They are hardworking, sober, eventempered, and orderly. They are watermen or *bhistes*, carrying water on the backs of bullocks in leather-bags or pakhals. They are also masons, messengers, grocers, carpenters, cigar-sellers, and day labourers. They are Hindus, and worship the usual Brahmanic gods and goddesses. Their family gods are Mahadev, Bhavani of Kondanpur in the Nizam's country, and Pachamma of Vaderpali in Telangan. Their family priests are Telangan Brahmans who conduct their marriages, but their death ceremonies are conducted by Jangams. They keep the ordinary Brahmanic fasts and feasts and go on pilgrimage to Alandi, Jejuri, Pandharpur, and Benares. Like other Hindus they worship Janai, Jokhai, the cholera goddess Marimma, and Yellamma, and believe in sorcery, witchcraft, soothsaying, omens, lucky and unlucky days, and consult oracles. They worship the goddess Satvai on the fifth day after birth, name the child on the twelfth, and clip a boy's hair before he is

three years old. They marry their girls before they come of age, and their boys before they are twenty-five. Instead of the boy the girl is taken on the shoulders of her maternal uncle to the boy's house, where the boy and girl are separately anointed with sweet-smelling oil by the barber and his wife, bathed, and dressed. Marriage coronets or bashings are tied to their brows and they are made to stand face to face on two low wooden stools. The priest repeats marriage verses, and when the verses are ended, the boy and girl are husband and wife. Turmeric roots are tied to the right wrists of the boy and girl with cotton and woollen thread and they bow before the house gods. The skirts of the boy's and girl's clothes are tied together, and they drink a mixture of milk and clarified butter. Next day the boy and girl are seated on the shoulders of a barber and washerman who dance to music. After a feast the boy goes in procession with his wife in a carriage to the girl's house. In a swing hung from the beams of the house, a wooden doll is laid and swung by the boy and girl, while women sing songs. The marriage ends with a feast. When she comes of age a girl is seated by herself for twelve days. They either bury or burn their dead. They allow widows-marriage and polygamy but not polyandry. They hold caste meetings, and send their boys to school for a short time. As a class they are poor.

UNSETTLED TRIBES

Unsettled Tribes included nine classes with a strength of 30,417 or 5.59 per cent of the Hindu population. The details are:

POONA UNSETTLED TRIBES.

| DIVISION. | Males. | Females | Total. | DIVISION. | Males | Females. | Totals. |
|--------------|--------|---------|--------|-----------|--------|----------|---------|
| Berads | 45 | 42 | 87 | Ramoshis | 8492 | 8240 | 16,732 |
| Bhils | 226 | 150 | 376 | Thakurs | 2935 | 2708 | 5643 |
| Kaikadis | 583 | 522 | 1105 | Vadars | 1306 | 1371 | 2677 |
| Kathkaris | 563 | 517 | 1018 | Vanjaris | 1395 | 1211 | 2606 |
| Phasepardhis | 55 | 56 | 111 | Total | 15,600 | 14,817 | 30,417 |

BERADS.

Berads, Bedars or Baidarus, apparently Hunters, are returned is numbering eighty-seven and as found in Poona, Haveli, and Indapur.

They appear to have come from the Karnatak districts where they are found in large numbers. [Details are given in the Belgaum Statistical Account, 163. 165. They speak Marathi and live in huts with little furniture except a few earthen vessels, a brass dining plate and waterpot, a blanket, and a few guilts or vakals. Their staple food is millet bread and pulse. They eat mutton, fish, for fowls, and several kinds of game. They drink to excess. They are a poor quiet tribe doing no harm. They are fond of sport and are sail to be fearless in attacking the wild boar. They are watchmen, husbandmen, labourers, and beggars. Their gods are Janai Jokhai, and Khandoba. They have a great respect for Brahmans and for Brahman gods and have no images in their houses. They say they do not want gods in their houses; they have them in numbers in the waste lands, every tree hill and watercourse is full of gods. They ask a Brahman to name their child. They marry their girls after they come of age and their boys before they are twenty-five. They bury their dead, or as they say leave him in the bush to become a spirit. They allow widow marriage and poly gamy, one man sometimes having as many as five or six wives. Polyandry is unknown. They have a headman who settles social disputes in consultation with other members of the caste. They do not send their boys to school as they are afraid they will leave them and join some high caste. They are badly off.

BHILS.

Bhils are returned as numbering 376 and as found mostly in Junnar. A few are returned from Khed, Shirur, Haveli, and Poona. They are wandering labourers going from place to place in search of work. They live in thatched huts and resemble Kunbis in food, dress, calling, and condition.

KAIKADIS.

Kaika'dis are returned as numbering 1105 and as found over the whole district. They say they are from Telangan, and came into the district about two hundred years ago. They are divided into Marathas and Kuchekaris who do not eat together or intermarry. The surnames of the Marathas are Jadhav, Malujya, Mane, and Sapatsar. The names in common use among men are Avadyaba, Bhiva, Dhaguba, Hamaji, Kaluba, and Shahajiba; and among women Gunai, Kalu, Pasu, Radhabai, and Santu. They are dark and weak. The men wear the top-knot, moustache, whiskers, and sometimes the beard. Their home speech is a mixture of Kanarese and Telugu and out of doors they speak a corrupt Marathi. Their houses are poor with walls of mud and

thatched or tiled roofs. They are neither clean nor neat, and contain a box, a cot, a cradle, a blanket or two, and earthen vessels. They keep donkeys, cattle, and fowls, and sometimes a servant. They are great eaters and are fond of pungent dishes and of onions. Their staple food is millet, split pulse, and vegetables. They give marriage and death feasts at which the chief dishes are sugar-cakes and molasses called gulavni. They eat fish and the flesh of the sheep, goat, deer, hare, and wild hog, and of wild and tame fowls. They drink liquor to excess, and smoke tobacco and hemp. The men dress in a loincloth or short trousers reaching to the knee, a coarse waistcoat, and Maratha turban, and the women in a bodice and robe whose skirt they do not draw back between their feet. They braid their hair and leave it hanging down the back. The men's ornaments are the gold earrings called balis and kudkyas and finger rings together valued at £8 to £6 (Rs.30-60). The women's ornaments are the nose-ring called *nath*, the necklace called *mani*, the silver bracelets called *gots*, and the gueensmetal toelets called jodvis, together worth £1 to £2 (Rs.10-20). They have a bad name as thieves and are always under the eye of the police. They make bamboo baskets of many sizes for storing grain and other articles, bird's cages, and children's toys; they also show snakes. The Kuchekaris make straw brushes or kuche and snares fur catching game. They carry sand, earth, bricks, tiles, and stones on their donkeys, remove sweepings and filth, and work as husbandmen and labourers. They earn 10s. to £1 (Rs. 5-10) a month. Their women and children help them in their work. They are poor, but have credit enough to borrow up to £5 (Rs. 50) at $2\frac{1}{2}$ to 5 per cent a month. They consider themselves equal to Marathas. They worship the usual Brahmanic gods and goddesses and keep the regular fasts and feasts. Their family gods are Khandoba of Jejuri, Bahiroba of Sonari near Sholapur, and Bhavani of Tuljapur. Their priests are Deshasth Brahmans who officiate at their houses during marriages and deaths. They make pilgrimages to Alandi, Jejuri, Sonari, Tuljapur, and Pandharpur. They have religious teachers or *gurus* who are generally Gosavis whose advice or *updesh* they take. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. They worship the goddess Satvai on the fifth day after the birth of a child, when they offer a goat and feast, the caste. They name their children on the twelfth day. They marry their girls when they are sixteen, and their boys at any age up to thirty. Their marriage guardian or devak is a mango twig which they tie along with an axe and a piece of bread to a post of the marriage porch. They rub the boy and girl with turmeric at their houses five days before the marriage. On the marriage day the boy goes in procession on horseback and sits on the border of the girl's village. His brother goes ahead to the girl's

house and tells her people that the boy has come. He is presented with clothes and the girl's relations accompany him back to his brother, jesting and knocking off his turban on the way. After meeting the boy at the temple the girl's father leads him and his party to his house. When he comes near the door of the marriage porch, a cocoanut is waved round his head and dashed on the ground. The boy and girl are made to stand in the marriage hall on two bamboo baskets face to face and a cloth is held between them. The priest, who is generally a Deshasth Brahman, repeats marriage verses, and at the end throws grain of rice over their heads and they are married. They are seated on the altar, and a thread is wound five times round their bodies. It is taken off, rubbed with turmeric powder, and cut in two equal parts one of which is bound round the boy's right wrist and the other round the girl's left wrist. A sacrificial fire is kindled and fed with grains of rice and butter. Marriage ornaments are tied to the brows of the boy and girl, the skirts of their garments are knotted together, and the girl's father fastening the knot and looking towards the boy, says ' All this time she was my darling now she is yours.' A feast is held and the boy goes with the girl to his house on horse back accompanied by male and female relations and music. Before they enter the house bread and water are waved round their heads. The boy and girl and other children dine, the chief dish being rice and milk. Their wrist strings are unloosed and the marriage ceremony is over. When a girl comes of age she is seated by herself for five days and sweet dishes are prepared for her. She is presented with a new robe and bodice and her lap is filled with five turmeric roots, lemons, betelnuts, and dry dates. They either bury or burn their dead, and mourn five, nine, or twelve days. On their return from the funeral, the chief mourner asks the four corpse-bearers to dine. Next day they go to the burning ground, remove the ashes, place two earthen jars filled with water on the spot, and return home. On the thirteenth they kill a goat and feast the caste. They do not observe death-days, and perform no mind-rite or shraddh. They have a caste council, and settle social disputes at meetings of the castemen. Breaches of caste rules are punished by fines varying from 3d, to 10s, (Rs. $\frac{1}{2}$ -5) the amount being spent on drink or on betelnut and leaves. They do not send their boys to school and are very poor.

KATHKARIS.

Ka'thkaris, [Details are given in the Thana Statistical Account, Bombay Gazetteer, XIII Part, p. 158-165.] or Catechu-makers, are returned as numbering 1080 and as found in Haveli, Maval, Junnar, Khed, and Poona. They are not residents of the district, but come from

the Konkan to dig groundnuts, and serve as labourers from October to May. They spend the rains in the Konkan. They are one of the rudest and poorest tribes in Western India.

PHASEPARDHIS.

Pha'sepa'rdhis, or Snarers, are returned as numbering 111 and as found in Haveli, Indapur, Sirur, and Poona. They are divided into Pardhis, Phasepardhis, and Vaghris. Phasepardhis are black, thin, and tall, and allow the hair to grow on the head and face. They speak Marathi and Gujarati. They live outside of villages under bamboo frames covered with matting, or under the shade of trees with scarcely any covering. They are wretchedly poor begging both by day and night, and gather where they hear that a feast is to be given. After the usual dinner hour they go from house to house to pick up the remains of the food. Not satisfied with what they get by begging they rake the spots where the dinner plates and fragments of food are thrown and lick the plates along with dogs and cats, the dogs barking at the beggars and the beggars driving off the dogs with one hand and eating with the other. They sometimes carry baskets, pieces of cloth, and earthen jars in which they put the remains of food they pick up. They are always in rags or half naked. The men roll a short waistcloth round their loins and rags of cloth round their heads, and the women wear a gown and bodice or often a piece of cloth round the loins like the men leaving the bosom bare. They are filthy, shameless, and noisy beggars. They wander in bands of three or four families. The men go first carrying nets and baskets, followed by the women with the wood of the cots and mat-huts, and the children with earthen pots and pans. Occasionally there is a bullock or a buffalo loaded with tattered blankets, baskets, bamboo sticks, and extra nets and mats. They are very skilful in making horse-hair nooses in which they catch birds and beasts. They are also robbers. They do not send their boys to school and are wretchedly poor.

RAMOSHIS.

Ra'moshis [Details from Captain Mackintosh's Papers on Ramoshis (Madras Jour, of Lit. and Sr.(1834) I. are given in the Satara Statistical Account.] or Children of Ram, perhaps originally Ranvasis or forest-dwellers, numbering 16,732, are found over the whole district. The Poona Ramoshis seem to be the outlying northern remains of the great Kanarese and Telugu tribe or group of tribes which are included under the general name of Bedars or Byadarus hunters and woodsmen. They claim to be of the same stock as the Bedars and say that the chief of

Shorapur in the Nizam's territory is their head. Besides Ramoshis they are called Naikloks, and those of them who do not eat flesh are styled Rambhakts or devotees of Ram. The division of the Poona Ramoshis into the two clans of Chavans and Jadhavs makes it probable that they have some strain of northern blood, though it is possible that they have been given the name Ramoshi in return for adopting Brahmanism and have styled themselves Chavans and Yadavs because they took service under chiefs of those tribes. In connection with their name the story is told that Ram, the hero of the Ramayan, when driven from his kingdom by his stepmother Kaikaya, went to the forest land south of the Narbada. His brother Bharat who had been raised to the throne by Kaikava could not bear to part from Ram. He followed Ram to the forest, began to do penance, and made friends with a rough but kindly forest tribe. After Ram's restoration Bharat took the foresters with him to Ayodhya and brought them to the notice of Ram, who appointed them village watchmen and allowed them to be called Ramvanshi or children of Bam. In social position they rank below Kunbis and above Mhars, Mangs, and Dhora. Of the two clans Chavans are considered the higher. On ceremonial occasions the leader or *naik* of the Chayans takes precedence, and the ceremony cannot go on unless one of the Chavan leaders is present.

The leading Ramoshi surnames are Ajgire, Berje, Bhandekar Bhosle, Chavan, Chukati, Phokne, Gergal, Ghodgar, Gopne, Gudgul Jadhav, Jhavle, Jhaparde, Khirsagar, Konde, Kuluch, Landge Madne, Majane, Rode, Role, Saparde, Shelar, Shinde, Shirke, Vajmare, and Yelmar. In some cases sameness of surname is considered a proof of kinship and is therefore a bar to marriage. This is not always the case. In matters of marriage the test of badge or kinship is not sameness of surname but sameness of devak the family god or guardian that is its badge or crest. Persons with the same devak are brothers and cannot marry. If before a marriage the boy's or the girl's crest is doubtful the matter is referred to and settled by one of the naiks or heads of the tribe. Among Ramoshi the crest or *devak* is generally some tree or a bunch of the leaves of several trees. No one may eat the fruit of or otherwise use the tree which is his devak. The names used by men are partly Marathi partly Kanarese. The Marathi names among men are Dhondi, Itu, Khandu, Lakshman, Narayan, Narsu, Pandu, Pangya, Tatya, Tukaram, and Tulsiram, the Kanarese names are Nagapa, Shivapa and Yelapa. The women's names are said to be almost all Marathi; the commonest are Aija, Begu, Chaitra, Dhondi, Kondi, Lakshumi, and Rakhma. A Ramoshi can hardly be known from Kunbi or other middle or low class Maratha-speaking Deccan Hindu. [Like most Hindu castes, especially perhaps fighting castes, Ramoshis are of mixed origin. They

allowed Kunbis to join them and many of them took as wives and still keep Kunbi women. Genu Naik.] The features of most are coarse and harsh though many have fine active and well-made bodies. The faces are usually flat and broad, but the skin perhaps from the damp and cool air of the mountains is often fair. The women are seldom handsome, yet some are good-looking and have pleasing faces. They dress the hair every fifteen or twenty days, and as a class are considered chaste. The men wear the top-knot, moustache, and whiskers, and let the beard grow when they have a family dispute. Many live hale and hearty to a great age.

Though Telugu seems to have once been the Ramoshi language they have so generally adopted Marathi that few of them know anything of any other language. They have also a special language which they almost never use except when they are plundering or telling secrets. In this language akul is a betel leaf; adag a trace, as adag gudsal You will leave a trace; adat woman or wife, as Adata childa matisa, Women and children do not tell; ambuj Mang, as Ambuj gudasala ka khogadla, kudmuli isa an okna, Why has the Mang come to our house, give him bread and let him go; aril goldsmith or carpenter; badil a stick; bangad a Vani; bokul a vessel also a hole or opening in the wall as, Bokul ka sitdrpadi, House-breaking or theft; boyali a Ramosni, Ka boyalis, yarvdd ka idtvad, Well Ramoshis, are you true Ramoshis or Ramoshis only in name; chamgad a Chambhar; chilad a child, as Chiladi ami tumachi, We are your children; ddg property; damal money or silver coin; damalivali rich; devarami a god, the sun or day, as Devaramichi padli God's share, Devaram okndydche To go and see the god, Devaram khugadle The sun is set; gadgali a pot or cocoanut; gadgalivdli a potter; gardhum an ass; gardhumvali a potter, geneli, dates also cocoa-kernel; gereli a hand or leg; as Gereliratul gona Pick up and hit with a stone in the leg; ghummad a pumpkin; godhmal wheat; gon to beat kill or plunder, as Gudus gonayache To plunder a house; Gonle tari yarvad mat isu, naka, Don't tell even if you are beaten or killed; gorel a goat; gudus a house, as Gudusat kakul khogddldy There is a dog in the house, or Gudsat shit dhe ka, Is there a lamp in the house; gudumi a hill, as Gudumila okna Run to the hill; guram a horse; is to take or give, as katul isa Give me the swora; Jatvad tal gudasat khobla an yarvad isa Leave the good turban in the house and take the bad one; jatik or jatvad, good, plentiful, rich, real, or young, as Jatvad ka yarvad Good or bad, rich or poor, high or low, young or old, strong or weak; junnam millet; kadal gram; kadle a key; kadli ornaments; kakul a dog, as Gudasat kakul khogadlav. There is a dog in the house; kam a letter; kan to look at, to tell, to do, as Kanti ka kyabadli, Is he looking at us or sleeping; much kanayachi to

commit a theft; kanli eyes; kapad or kapaduli clothes; kat to fasten to the waist, as Katun tdk, Fasten it to the waist; katul a sword; khobal to hide, as Kolchat khobal Hide it under ground; khogad to be, to come, or to sit, as Gudasat kakul khoqadlay There is a dog in the house, or Nalkya orid khogadlay The sepoy has come to the village; kodle cock, hatchet, nail, or lock; kolach earth or grain; kolgul a shoe, as Kolgulivar patatyal They will find you out from your shoes; kokanvddya an Englishman or a saheb; kor a blanket, as kor tisakva, Send the blanket; korguli or korpade a shepherd; kos to cut; kudmuli bread, as Kudmuli tagayachi To eat bread; kundal a rabbit; kyabad to sleep as Kanti ka kyabadli, Is he looking at us or sleeping; machulya a Kunbi as Gudus machulyachi kd, pargydchi Does the house belong to a Kunbi or to a Brahman; mat to tell, as Mat isu naka, Don't tell; mekal a she-goat; rnekhum a tiger; menuli fish; mond the penis; mudak an old man; mudkayli a mango; much theft; muchvad a thief; mudod father or mother; mulvad a Musalman; murel a copper coin; nadvad a barber; nakul a nose; nalkya a sepoy, as Phadvadichya gudusamadi nalkya khogadlay patil re patil The sepoy is sitting in the patil's house, take care he will arrest you; *netal* rice; *nedle* water, oil, liquor as Nedle tagayache To drink liquor, Nedle tagun yarvad vol You will drink and become foolish; nor mouth; nyan gold; nyanval clarified butter; okan to run away, to come, to go, as Gudumila okna Run towards the hill: orid a village, as Nalkya orid khogadlay The sepoy has come to the village; otukli cowdung cakes; padli a share, as Padli isa amachi Give us our share; pal blood or milk; pdrag a Brahman; paroshi the Ramoshis' language; pat to catch, to arrest, as Patil re patil Take care he will arrest you; phad great as Phad kokanvadya the great saheb; phadvad the headman, as Phadvad pata damali adga, Give the headman some money; phadur village; phakat moonlight; pillad a knife, an arrow; podgya a young goat; pog tobacco; pudkul door, box, or anything made, of wood; pudkuli firewood; pydr, to tell, detection; rai, a dark night as Raichach okna. Run while it is dark; rdtul a stone, as Gereli ratul gana Pick up and hit with a stone in the leg; rond two; saj bajri; gasna to die; shedvad a Mhar; shit fire, a lamp, to burn, as Gudusat shit ahe ka. Is there a lamp in the house ; tal a turban; teru a road; tiskaa to send; tubut a gun; tunkul mutton; tupli hair, moustache, beard; vakat one; yadas to tell as Parag yadasal tela damli adga The Brahman will tell, give him money: yamkal a bone; yarap to fear, to guench as Yarap mat isa Do not fear; Shit yarapli The lamp is out; yarvdd or yerid, bad, poor, little; yedul ox or cow; yenuni ears of grain.

Some live in neat, clean, and well cared for houses like Kunbi,, houses either tiled or thatched, with walls of brick or earth, having a cook-

room and one or two sleeping rooms. Others live in miserable huts outside of villages. They have a yard round their houses, in which they stack grass and in the rainy season grow pumpkins, beans, and vegetables. Attached to the house is a shed in which are kept one to six pairs of bullocks, two to four cows, one or two buffaloes, a mare or a horse, and about two hundred sheep. All keep dogs and some keep fighting rams. The well-to-do have a good supply of clothes and copper and brass vessels and a few have guns. They have field servants Rimoshis, Kunbis, or Mhars, and a Dhangar shepherd. Their staple food is millet, pulse, vegetables, curry, and sometimes fish. They occasionally eat rice and their holiday dishes are gram cakes or puranpolis and rice flour balls stuffed with molasses called ladus. Except some vegetarians who are known as Rambhakts or devotees of Ram, they eat the flesh of sheep, goats, and fowls, and of wild pig and several other kinds of game. They never eat cattle or village swine. About once a week they eat mutton either sheep's flesh or goat's flesh, except the devotees of the goddess Bolai who never eat the goat. They feast the caste on mutton and liquor at marriages and when an offender is allowed back into caste. To their birth and death feasts only near relations and friends are asked. Except some scrupulous souls who eat no flesh which has not been killed by a Musalman priest, Ramoshis eat sheep goats and fowls slaughtered by themselves or by a Musalman priest or *mulla*. As a rule the offerers kill and eat the sheep or fowls which are offered to Khandoba, Bahiroba, Janai and Satvai. They are fond of spirits; both men and women drink, to excess when they can afford it. Formerly they generally drank in the evening before meals, and on Dasara and other holidays they drank at any time of the day. The recent suppression of smuggling and the rise in the price of liquor have done much to check drunkenness. They chew betelnut and leaves, smoke tobacco, and use opium. The men wear the waistcloth or drawers and occasionally a loincloth a turban coat and blanket and carry a stick. The women dress like Kunbi women in the ordinary full robe and bodice. Most of them have a spare suit of rich clothes for holiday wear. They are frequently well dressed wearing gold and silver ornaments. The men wear the earrings called antias, the necklace called *kanthi*, and strings of Shilemanis or Sulemani. onyxs to keep off spirits and the evil eye, finger rings, and silver belts round the loins. The women wear a nosering, a necklace, silver bangles, anklets called todas, a bedi worn on one leg, and too-rings called ranjodvas on either foot.

When out of work the Ramoshis live by stealing. Even if sevarely beaten, they never confess except to their *naik* as the proverb says, *To Ramoshi ahe,* He is a Ramoshi, that is he will never confess. They

are very honest among themselves, and do not betray their castefellows even at the risk of their lives. Those who have entered Government service have a great regard for their masters and are true to their salt. A much larger number than formerly live by Government service and husbandry, and much fewer by stealing. They are hardworkers both as husbandmen and as robbers and would never like to eat bread earned by others. Their chief calling is Government or private service as watchmen and husbandry. These who are well-to-do lend money. Many are landholders and many work as field labourers in which they are not less skilful than Kunbis. Field labourers are paid either in corn or in cash, the usual rate being $4\frac{1}{2}$ to 6d.(3-4 as.) a day. Many died in the 1876-77 famine. Since then the crops have been good and they are recovering. Many of them owe £5 to £10 (Rs.50-100) generally on account of marriage expenses. According to their credit they pay ¼ a. to ½ a. the rupee, about two to three per cent, a month. They say they do not eat from the hands of Buruds, Ghadses, Musalmans, Parits, Sonars, Sutars, and Telis, but work together with Kunbis and smoke from the same pipe. They do not touch Mhars or Mangs. Besides Ram, who is the proper object of a Ramoshis adoration, they worship Mlahadev and Ramchandra and say they cannot tell which is greater. Like most Hindus they worship Musalman saints or pirs. In some respects they seem to have an unusual leaning towards Islam saying that they and the Musalmans worship the same god, for what is the difference between Ram and Reim that is Rahim the Merciful. They also respect Vetal and his spirits or mothers, Fringai, Janai, Kalai, Mhaskya, Mukai, Navalai, Tukai, and Vaghya. They believe in fate or *kapal*, in destiny or *daiv*, and in chance or nashib. An English tomb in the Loni bills about eight miles east of Poona is called Ram-deval or Ram's temple. An old Ramoshi woman lives at the tomb, pours water over it, keeps a lamp burning near it, and allows no one to visit it who has eaten flesh since the morning. Religious Ramoshis who are called *Rambhakts* or worshippers of Ram and Krishna never eat flesh. But flesh-eating and non-flesh-eating Ramoshis do not object to eat together or to intermarry. Again some Ramoshis say that Mahadev is their great god, and that the *ling* is the proper object of worship. They say they were once Lingayats, and, though they sometimes employ Brahmans, that their real priest is a Jangam or Lingayat priest. Since they have taken to flesh-eating, they worship the *ling* through Khandoba who they say was a Lingayat Vani before he became a god. Khandoba rides on a horse which he shares with two women riders a Vani his wedded wife in front of him, and Banai a Dhangar his mistress behind him. Khandoba once went to a Dhangars' hamlet where lived a beautiful woman named Banai. On seeing each other Khandoba and Banai fell in love, and when the

Dhangars came with sticks to drive him away Khandoba caught Banai in his arms, lifted her on his horse, and galloped to Jejuri, where he built a house for Banai near his temple, and there they lived till in time both of them died. The Dhangars are Khandoba's most attached worshippers. They bring stone sheep to Banai, and say Here is a sheep, give us flocks and herds.' As turmeric or bhandar is the vegetable abode of Khandoba the Ramoshis swear by turmeric and hold that no other oath is binding The Ramoshis worship the ox, because it is Shiv's carrier and pay it special honour on the Mondays of Shravan or August-September They worship the horse on Dasara Day in October, and the cobra or nag on Nag-panchmi or the Cobra's Fifth. They worship cows, monkeys because they are Marutis, and crows in Bhadrapad or September-October on the yearly mind-season feast All Souls tide In those days cooked rice is laid on the house-tops and the crows are asked to come, eat, and be satisfied. The Ramoshis keep the ordinary Brahmanic festivals, their chief days being *Shimga* in March Aprial Gudi-pdva in April, Nagar-panchami in August - September, Dasara in September-October, and Divali in October-November. On the Shimga or Holi full-moon in March-April cakes or puran-polis are eaten, and much liquor is drunk. In the evening each Ramoshi makes a little holi in front of his house. Ten to twenty cowdung cakes are piled in a heap, and in the middle is set a piece of sugar-cane about six inches long, together with a copper coin and five pieces of dry cocoa-kernel. The head of the house takes a water-pot full of water and walks five times round the fire sprinkling water as he goes. The men and boys of the house shout aloud, beat their mouths with the backs of their hands, abuse each other, and the then go to join the rest of the people at the village holi in front of the head man's office at the village cross. The next day is called the dhulvad or dirt day. The people throw filth and dirt at each other, or they take a big pot of water and put earth in it and if they meet a will dressed man they throw earth over him, and ask him to come and play and challenge him to wrestle. The third day is the shenmar or cowdung-pelting day, when cowdung is thrown on all well-dressed persons. They dance all night dressed in women's clothes and sing indecent songs. On the fourth day nothing is done. The fifth day is the colour fifth or rangpanchmi when red dust and water are thrown on all passers-by. After he gets married a Ramoshi generally chooses some Gosavi to be his spiritual teacher. A man generally chooses his father's teacher or if his father's teacher is dead he chooses his disciple and successor. As Gosavis do not marry they are not succeeded by their sons, but they usually keep women and adopt one another's sons. The class is almost entirely recruited from Marathas or Ramoshis who have vowed, that, if they have a child or if their child recovers from sickness, they will

make it a Gosavi. When a man wishes to place himself under a spiritual teacher, or, as the phrase is, to make a teacher, he asks the teacher to come to his house. When the teacher comes he kindles the sacrificial fire or hom, and feeds it with hemp, butter, and wheat flour. He reads a few verses out of a sacred book and asks the novice whether he has become his *chela* or disciple. The boy answers he has, and the teacher tells him to walk as he bids him walk and he will prosper, to tell no falsehood, to give no false evidence, to do no wrong, and not to steal. A quantity of fruit is laid before the teacher who asks the boy to give him the fruit which he likes best. The boy presents the teacher with his favourite fruit and never again eats it. The teacher whispers a verse into the boy's right ear which is called the ear-cleansing or *kan-phukne*. After this the teacher visits his disciple generally once a year and stays a few days during which he is treated with much respect.

When a child is born, if it is a boy the family rejoice and beat a metal plate; if it is a girl the family grieve and no plate is beaten. Women neighbours, Ramoshis, Kunbis, Dhangars, Gavlis, and Kolis and even Mhars and Mangs, pour potfuls of water in front of the house door. The navel cord is cut by a midwife who generally belongs to their own caste; and the child and mother are bathed and laid on a cot. On the fifth day a grindstone is worshipped; an arrow or a needle is stuck in a millet stalk, and, with a knife and a lighted earthen lamp, is set in the mother's room; and the men and women keep awake the whole night. They do not consider the mother unclean. On the twelfth day either five or seven pebbles are laid in a row on the road-side in front of the house, and turmeric, redpowder, and flowers are dropped over them. The child is brought out and set in front of the pebbles and is made to bow before them. Some women, including the Ramoshi women who poured water over the threshold on the first day, are asked to the house. Any Mhar or Mang woman who helped on the fifth day brings handfuls of millet and in return is given four or five wheat balls. The child is then named by a Brahman or a Jangam. If the father can afford it a feast is given in honour of the naming either on the same day or some time after. The mother rests for about five weeks before she goes about her ordinary work. When the child is two or three months old it is taken to the temple of Satvai, Ekai, or some other goddess in a particular village; its head whether it is a boy or a girl is shaved, and the hair is kept in a cocoanut-shell and laid before the goddess. A goat is killed and a dinner is given. Those who cannot afford to go to the goddess' temple perform the ceremony in their own village, keeping the hair and taking it to the goddess on the first opportunity.

Ramoshis generally marry their girls before they come of age, and their boys between eight and twenty. A wedding generally costs the boy's father £10 to £20 (Rs. 100-200) and the girl's father about the same, though a poor man may marry his daughter for £1 to £2 (Rs. 10-20). When he has a boy growing up and can raise money enough to meet the cost of his wedding, a Ramoshi looks about among his castepeople for a family which has a girl of a suitable age for his son. When he has found a suitable match, he starts for the house with one or two men and women. When they arrive they tell the head of the house that they have come to ask his daughter in marriage for their son. The girl's father says, he is willing but that he can fix nothing till he has seen the boy. To show that he favours the match he presents the boy's father and his people with clothes. After a few days the girl's father with one or two men and women, of whom the girl's mother is never one, go to see the boy. They are fed at the boy's house and are presented with clothes. If the girl's father approves of the boy the two fathers go to a Lingayat priest, or if there is no Jangam to a Brahman, who looks in his almanac and writes on two pieces of paper the proper day for the turmeric-rubbing and the day and hour for the wedding. The two fathers take the papers and go to their homes. On the day fixed for betrothal the boy's father takes a few jewels, a robe, a bodice, a sash, redpowder, a cocoanut, about a pound of sugar, and a rupee, and, with five or six friends, goes to the girl's house. After refreshments the boy's father seats the girl on his knee, puts sugar in her mouth, and presents her with the clothes. The girl dresses herself in the clothes, and, after rubbing her brow with redpowder, sits near the boy's father, who fills her lap with five pieces of cocoa-kernel and sugar. To seal the contract the boy's father lays a rupee on the girl's brow. Her father takes the rupee and the boy's father presents the guests with betelnut and leaves and goes home. In well-to-do families, music plays while the betrothal is going on. One to four years generally pass between betrothal and marriage, the boy's father giving the girl a yearly present of clothes. When he is able to meet the cost of the marriage, the boy's father goes to the girl's father and asks him to let the marriage take place. If the girl's father is unable to meet his share of the cost the boy's father with one or two friends goes to the girl's house and settles what amount is required. After a few days he again goes to the girl's house with one or two friends and advances her father the promised sum. A few days after arrangements have been made to meet the cost of the wedding, the parents of the boy and girl go together to a Brahman, explain the object of their visit, and tell him the names of the boy and girl. The Brahman consults his almanac, makes calculations, end writes on a piece of paper their names, the month day and hour at which the marriage should take

place, and the name of the woman who is to begin the ceremony. He touches the paper with redpowder, and makes it over to the girl's father, who hands it to the boy's father. The boy's father asks and Brahman says on what day the turmeric-rubbing should take place, and names the women who should rub the turmeric. Shortly before the day fixed by the Brahman marriage booths are built at both the boy's and the girl's houses. On the turmeric-rubbing day the boy's female relations meet at his father's, pour turmeric powder into a metal plate, and mix it with water. The boy is stripped naked, and, while the musicians play, the woman who was named by the Brahman begins to rub the boy with turmeric, and after she has begun the other women join. After being rubbed with turmeric, the boy is bathed and one of the men of his family takes the rest of the turmeric with music to the girl's house. If the two families live thirty or forty miles apart the boy's father buys ¾d. worth of turmeric and gives it to the girl's father when the Brahman fixes the turmeric day. After the boy and the girl have been rubbed the women of the house make a cloth and a few grains of Indian millet yellow with turmeric, and taking a sprouting, literally a child-bearing, *lekruvale*, root of turmeric, tie it in the cloth and fasten it round the neck of a stone handmill. Five married women mix wheat, millet, and turmeric, grind them in the same stone handmill into about a pound of flour, and make them into a few cakes. Five ear-bearing plants of Indian millet or *javar* are dug out of the ground, bound together by a thread, and with the roots covered with earth are set upright near the family gods and daily sprinkled with water. Between the turmeric-rubbing and the wedding the boy and his little sister, if he has a sister or if not some other girl, are feasted by relations and castefellows. At each house to which he is asked the boy is rubbed with turmeric and bathed and sometimes feasted. Then the family gods are worshipped. Four betelnuts, representing the gods Khandoba and Bahiroba and the goddesses Bhavani and Navlai, are rubbed with turmeric. or *bhandar* and redpowder or *kunku*, and enough sheep are sacrificed in front of the booth to feast the guests. The next ceremony is consecrating the branches of certain trees as devaks or wedding guardians. During the day on which the animals are sacrificed, the village temple ministrant or *gurav* cuts leafy branches of the mango Mangifera indica, umbar Ficus glomerata, and jambhul Syzigium jambolanum, and of the rui Calatropis gigantea and shami shrubs, and a few stalks of grass, and sets them in Hanuman's temple. In the evening the boy's father and mother start for Hanuman's temple with music and a party of friends and relations. The boy's mother holds a basket with a hatchet and a cake of flour. The ends of their robes are tied together and fastened to a cloth, which four men of their family hold over their heads as a canopy. On reaching the temple they set a

betelnut and five betel leaves before Hanuman and ask his blessing. They then take the branches and the grass and lay them in the basket. When they come home they take the branches and the grass out of the basket, tie them together, and fasten them to the front post of the booth five or six feet from the ground. Early in the evening they feast on the sheep that were sacrificed, and drink liquor. This is the only meal during the wedding at which meat is eaten as the booth is held to be consecrated to the tree branches and marriage gods. After the feast is over there is a dance, when the dancer, with an accompaniment on the samal or drum, tal or cymbals, and tuntune or one-stringed handharp, recites stories of celebrated chiefs. During the night the boy's father takes five sugarcanes or five millet stalks and five cakes. The canes are tied together by a loose string, so that when they are set upright on the floor and the lower ends are pulled somewhat apart, the cakes can be hung in the middle. On the floor, immediately below the cakes, some grains of wheat and millet are spread in a square which is divided into four parts by lines drawn from opposite corners. A copper pot filled with water is set on the grain, and a piece of cocoanut and betelnut and betel leaves are laid on the top of the waterpot. The dancer's iron lamp is set near the waterpot and the dancer begins to recite. At the end of the recitation the guests are given some pieces of sugarcane and bread, and the dancer some food and 2s. (Re. 1) incash. The same ceremonies are performed at the girl's house. In addition, either on the wedding or on the day before the wedding, an earthen altar called bahule seven cubits long according to the measurement of the girl's arm, with a step to the east, is raised opposite the entrance to the marriage booth. The village potter brings twenty earthen pots of different sizes, whitewashed, and specked with red green and yellow, with lids on two of them. The potter piles five of these vessels one over the other, and with a lid on the topmost, close to the four corners of the altar opposite the step. The carpenter is called to build a canopy or sabra over the altar. He makes the canopy and is presented with a set of men's clothes. A large earthen water vessel called tanjan is set near the entrance for the use of the quests, and a betelnut is tied in yellow cloth and fastened round the neck of the waterpot. Neither the altar, canopy, nor waterpots are set up in the boy's booth. At the boy's house on the afternoon of the wedding day the bridal party start at and hour fixed so that they may reach Hanuman's temple in the girl's village an hour before sunset. The boy, who is mounted on a horse and holds a dagger in his hand, is dressed in rich red clothes and wears a coronet or bashing of red or yellow paper ornamented with tinsel. He takes a second coronet with him for the girl and starts accompanied by male and female friends or by musicians. When the party reach the girls village the Mhar comes out

and waves a lighted lamp before the boy's face and is presented with clothes or a sash or shela. On reaching Hanuman's temple the boy's brother or vardhava, with a few friends and with music, rides on to tell the girl's people that the bridegroom has come. He is asked to dismount and eat a dish of vermicelli or shevava mixed with milk which is set on a stool before him. While he eats the girl's brother or her sister gently draws the stool away and lets the dish fall on the ground. Then the girl's relations break wafer biscuits or papads over his head and pelt him with the pieces so that he has to retire. After the bestman has been driven from the house, the girl's father, with a party of men and women and with music, goes to Hanuman's temple. He presents the boy with a turban, a sash or shela, and a pair of shoes. and asks him to his house. The boy mounts the horse holding a dagger in his hand, and the groom's maid or karavli, who generally is his younger sister, is seated behind him holding on her head a small copper pot with five ears of millet. Several men of the boy's party hold sticks with bright cloth tied to their ends. The procession moves slowly, the musicians playing, and the women throwing on the boy's head Indian millet steeped in turmeric. At the girl's marriage booth one of the women of her family, with a potful of water on her head, comes to meet the bridegroom. The bride's mother comes out with a wheat flour lamp in a brass plate, and waves it round the bridegroom's face, who presents her with a robe and a bodice. Then a cocoanut is waved round the bridegroom's head and smashed on the ground, leaving the pieces to be taken by the village Mhar. He then dismount and enters the booth followed by the guests. The priest enters the booth after the bridegroom and is presented with the paper fixing the hour for the different ceremonies. He reads it and repeats texts and the musicians play. A Brahman piles two heaps of rice near the altar, and a curtain called Ganga-Jamna is held between the heaps. The bridegroom stands on one heap, facing the west, with a dagger in one hand and a cocoanut in the other, and a relation stands close by holding a naked sword over the boy's head. The girl is brought from the house by her brother or sister, and is made to stand opposite the bridegroom, facing east, slightly bowed, and with her hands joined and held in front. Behind her stands her maternal uncle. Yellow rice is handed to the guests. The Brahman repeats a few verses, and, as soon as the lucky moment comes, the curtain is drawn on one side and the girl gives her right hand to the boy; the guests throw yellow rice over the boy and girl, music plays, and guns are fired. The boy sits on the heap of rice on which the girl stood, and the girl sits on the heap on which the boy stood, and the ceremony ends by handing the guests betelnut and leaves. The Brahman passes a thread four times round the neck and shoulder, and four times round the waist of the bride and

bridegroom, and is paid a few pence to a few shillings ($\frac{1}{2}$ - $\frac{3}{4}$ anna to Rs. 3-4) according to the family's means. Then the Brahman breaks the thread which he wound round the bride and bridegroom's necks. He steeps it in turmeric water, twists it, and ties a sprouting or bachevala turmeric to it, and fastens it to the boy's right wrist. The thread that was wound round their waists he twists and fastens round the girl's right wrist, and warns them that so long as the turmeric is round their wrists they must eat no flesh. The girl's father places the lucky necklace or mangalsutra of three or four yellow threads and two gold and five dark glass beads in the boy's hand, and the boy fastens it round the girl's neck, and two silver toe-rings or jodvis are put on her feet. The next ceremony, which immediately follows the last, is the maiden-giving or kanyadan. A brass plate is brought, and the girl's mother, taking a copper pot full of water, pours the water on the boy's feet and the girl's father washes them. Then the girl's mother lays her head on the boy's feet and tells him that she has made over her daughter to his care. The Brahman is presented with money and tells the boy and girl to seat themselves on the altar. The boy lifts his wife, and resting her on his hip, sets his right foot on the altar step and seats himself on the altar with his wife on his right. Some stalks of surti Citysus cajan, of sonkari Crotolaria juncea, or of jovar are lighted, and the boy throws butter on the fire, while the girl keeps touching his hand with hers in sign that she is helping him. Then the Brahman or some relation ties together the hems of their garments and the boy lifts his wife and walks five times round the fire, and they go into the house and fall before the girl's house gods. They sit down before a brass or silver plate with an embossed face of Khandoba, stretch forward their clasped hands, and bow till their heads touch their hands. While bowing before the gods, the bridegroom stretches out his hands, seizes one of the gods, and hides it under his robe. They come out into the booth and walk once round the altar, keeping the altar on their right, the boy going first and the girl following. When they have finished making the turn, they sit on the altar, the girl on the boy's left. The bride's people come up and demand the god and the boy refuses to part with it till they give him money. The knot in their garments is untied by one of the kinswomen to whom the boy promises a robe or a bodice. The feast to the guests is served in the booth, the boy and his groom's maid or karavli eating on the altar, while the girl dines with the rest of the women in the house. None of them eat till the boy has begun. Before they begin the guests ask the boy 'Have you not got your dinner.' He says 'I have got it.' They say What order have you to give.' He says 'Eat.' While the guests are eating the bride's father and mother move among them to see that all are well served. When the men are finished the women dine and some

dinner is sent to the boy's house for his father and mother. Then the girl is called and she and the boy are seated together on the floor In front of them yellow rice is piled in ten or eleven small heaps and a betelnut is put in the middle. The boy is asked to tell his wife's name and he repeats it, Gopi, Gopi, each time touching one of the yellow rice heaps and ending with a loud Gopi and a smart blow on the central nut. Then the girl has to say her husband's name, touch the rice heaps, and come down with a sharp blow on the betel-nut. Then the bride's maids have to mention their husband's name and all the other quests have to name their husband or their wife. The spice of impropriety in this mentioning of husband's and wife's names causes much merriment. After dinner the quests leave, the boy's party going to some house in the village which has been set apart for their use. The boy remains all night in the marriage booth. Next morning the boy and girl with a party of their friends are mounted on the horse on which the boy rode the day before. They stop under some trees and the boy retires and then the girl retires and they come back in procession reaching the house about ten. In the afternoon the girl's mother, with a few kinswomen and the village washerman, goes with music to the boy's lodging to bring him and his relations to the girl's house. When they come near the house the village washerman spreads a sheet on the ground, and the women walk on the sheet, the washerman picking up one sheet and laying it in front of them as they walk. The bridegroom and the men of the party walk at some distance behind. The boy's father, accompanied by a Brahman, takes some clothes, dry dates, jewelry, wheat flour, rice, cocoa-kernel, sugar, betel leaves and nut with him in a copper plate, and seating the boy and girl side by side fills the girl's lap with the clothes and other articles. The relations and other castefellows come towards the bride and bride-groom bringing a few grains of rice in their joined hands and drop the rice on the head of the bridegroom and bride, and, taking a copper coin, wave it round their faces. These coppers become the property of the village *gurav* who sits close by with a plate. The Brahman is presented with 2s. to 4s. (Rs. 1-2) which is called the booth-fee or mandavkhadani, and presents are given to the patil and others who have claims. Those of the boy's relations who can afford it, present his parents with clothes or money, and the relations of the girl present her parents with clothes according to their means. The girl's father presents the boy with a small copper pot and a plate. The musicians play all this time in front of the booth. Then four metal pots full of water are set so as to make a square outside of the booth. The bride and bridegroom sit in the middle of the four pots on a plank of wood, the boy wearing a cloth or pancha hanging from the waist and the girl an old robe and bodice. Some one takes a brass plate, puts

redpowder or kunku on it, pours on water, and lays a betelnut in the water. The bride takes the betelnut and holds it in her clasped hands and the bridegroom lays her hands on the ground and with his left hand tries to force out the nut, which after a short struggle he succeeds in doing. He then holds the nut in his left hand and after a struggle the bride succeeds in forcing it out. These trials of strength cause much merriment among the guests. Then the boy rises, and the girl stands in front of him and he lays his hands on her head and the groom's-maid or karavli throws water over him and the bridesmaid throws water over the bride. Then the bride and bridegroom blow water from their mouths at each other. Then the boy sits down with the edge of a metal plate under his toe, and the girl's brother comes up and pushes him over on his back. The people laugh, but the boy takes no offence as it is all done according to rule. Then the boy gets up and stands with one foot in the metal pot and the other on the stool till fresh clothes are brought. The girl is carried into the house. Then the boy dresses in fresh clothes and goes into the marriage booth and sits on the altar. In the house the girl puts on a green robe or patal and a green bodice and her bridesmaid rubs turmeric on her body. When the turmeric-rubbing is finished the bride draws a cloth over her head like a veil, rubs redpowder on her brow, and ties a mundaval round her head. Then the groom's maid rubs the boy with turmeric as he sits on the altar. He is dressed in a short coat and turban and his brow is marked with red. The marriage coronet is tied to his turban and his feet are rubbed with redpowder. Then the bride comes out and is seated on the altar on her husband's right. Ten or twelve little dough lamps are lighted and placed in the middle of the altar. When they touch the small heaps of rice the bridegroom and bride repeat each other's names. When the naming is over betelnuts and leaves are laid in a plate, and all the party, except the bride, with the bridegroom at its head and with music, go to the village office or chavadi where villagers of every class are gathered. Here the bridegroom formally presents his offering to the head of the village. Then the headman tells his assistant or chaughula to ask the Ramoshi why he has brought the betelnut. The boy's father answers, 'My child is being married, I brought it for the people. What shall I give you to eat'? The assistant says, 'Give a dinner to the village.' If the father is a rich man he feeds the village: if a poor man he pays £1 to £2 (Rs. 10-20); if a pauper he holds up his hands and is allowed to go. Then the headman gives the Ramoshis leave to go and they return to their marriage booth. In the evening all the castepeople are seated and the boy's father gives them betelnut. He asks the guests what dinner he will give them, and says he has pulse and bread. They say,' Pulse and bread are no good. We want four goats, mangoes, rice, and liquor.' The goats are brought to

the booth and their throats are cut by a Musalman priest. All eat except the bridegroom and bride who cannot eat flesh because of the turmeric tied to their wrists. When the food is ready and the quests are seated, the liquor is brought and given to the headman or naik, who goes round with the bottle and poors liquor into a leaf cup which is set beside each quest. The host's family follow the headman and lay leaf plates in front of each guest and help them to the different dishes. This dinner is called *gav-jevan* or the village-feast. The guests often take too much liquor and get quarrelsome, and the girl's father goes to them and begs them not to disgrace his child's wedding by fighting. When the men have finished the women dine and some of them also take liquor. It is a noisy merry scene and goes on till night. Next morning the bride is dressed in a new robe and bodice. A priest is called, a Lingayat priest if possible, and all the people gather in the booth. The boy who holds a rich robe and bodice in his hand and the girl are seated facing the priest and the boy hands the clothes to the priest. Then her bridesmaid carries the girl into the house and her green robe is taken off and the new robe put on. She does not draw the end of the robe over her head, but spreads it across her lap and puts in it five pieces of turmeric, five pieces of cocoa-kernel, and five pieces of betelnut. She also lays in her robe wheat and rice called karanda-phani and ties the ends of her robe at her back. She comes of and sits behind her husband; the priest repeats texts, and the boy and girl are seated on the altar. The ends of their robes are tied together and they go into the house. In the house they fall at the feet of Khandoba, the family god, and the girl's mother gives one plate of vermicelli of *shevaya* to the bridegroom and another to the bride. They sit together and eat. Meanwhile in the booth the aher or present-giving goes on. A representative of the boy and of the girl sit in front of the priest and the boy's friends give clothes to the boy's representative and the girl's friends to the girl's representative. There is much merrymaking. When the present-giving is over, the priest calls 'Kanyadan' or the girl-giving. Then the bride's mother's brother and his wife come with their clothes tied together, and the wife puts a cloth over her head and holds a plate in her hand, and comes before the priest who repeats texts. The boy and girl are called and the boy's toes are put in the plate, water is poured over the boy's toes, and the girl's uncle sips the water and says,' I give you my sister's child. She is now in your keeping, see that you care for her.' The water is thrown away and the girl's sister keeps the plate. The boy's father brings a robe and bodice before the priest who gives them to the girl's maternal aunt. This ends the wedding.

The boy's people should leave the girl's house on the third, the fifth, or the seventh day of a wedding. They should leave on an odd day, not on an even day. The girl's father asks the boy's father to stay but he refuses, and cakes and other eatables are tied up for their use. Before they go all sit in the booth and the boy his mother and father are seated in a row. The girl brings molasses from the house and drops a little into the mouths of the a boy's father and mother. Then the girl's father and after him the girl s mother lift the girl and lay her first in the boy's father's and then in the boy's mother a lap saying, 'She was mine, now she is yours.' When this is over the women guests rise and the women of the boy's party make a rush for the pots which are piled at the corners of the altar, and carry them off, often breaking them in their haste. Then all go to the house where the bridegroom has been lodging and the bride's mother and he make the owner a present. The boy's party start for their village taking with them the bride and one or two of her nearest friends. The bride and bridegroom ride and the rest travel in carts. They start with music which is kept up till they have passed the boundary of the girl's village. On reaching the boundary of the boy's village the boy and girl and one or two attendants stay in the temple of Hanuman and the rest go to the boy's house and make ready pulse and bread. About seven o'clock they bring musicians, set the boy and girl on the horse, and forming a procession go round the village, the householders as they pass offering sugar to the bride and bridegroom. When they reach the boy's house the boy and girl go in together and worship Khandoba the house god. They then come out and two metal pots are brought and the bride's-maid and the groom'smaid wash them in warm water and the marriage mitre is taken off. When they are bathed and dressed the groom's-maid holds a cloth in front of the boy and refuses to let him pass till he promises to marry his child to hers. Then five men come in front of them, each of them holding a betelnut. The boy tells them they must give him the nuts. They say, Why? He answers, 'To feed and clothe my wife.' They agree, but instead of giving them each of them eats his betelnut. Then a dinner of bread and pulse is given to the marriage party. On the fifth day the girl opens the end of her robe and distributes the betelnuts and cocoa-kernel to the people of the house. She draws the end of her robe over her head and on the next day goes back to her father's. A Ramoshi marriage costs £5 to £20 (Rs. 50-200).

Widow-marriage is allowed and practised. Still a feeling of disgrace attaches to widow-marriage. If a woman is left a widow with three or four children she tells her parents she must get another husband. They call a caste meeting and some widower who wishes to avoid the expense of marrying a maiden agrees to marry the widow. He must

give her toe-rings, a nose-ring, four bracelets, and a suit of clothes. They are married in the evening by a Lingayat priest who reads in a low tone. Only men attend. It is very unlucky for a married woman to hear any of the service and the neighbour's houses are for the day deserted. A dinner is given to the caste. The husband and wife separate in the evening and do not see each other or any one of the caste for a day. They then live together. If a woman has lost three husbands and wishes to marry a fourth, when the ceremony is being performed, she keeps a cock under her left arm, and the priest reads the ceremony in the name first of the cock and then of the man; so that if the evil in the woman causes a death the cock loses his life, not the fourth husband. Though the Ramoshis do not admit it, the evil in the woman probably a the spirit of her former husbands, or rather it is the spirit of the first husband who killed numbers two and three for meddling with his property. The expenses attending a second marriage, which is called *motar* or *pat*, including the Brahman's fee and the marriage feast, average £2 to £3 (Rs. 20-30).

When a sick man is on the point of death, the son or some other relation lays the dying man's head on his thigh, and awaits the moment of death. A Jangam or Brahman is sometimes called and presented with alms. After death the body is laid in the veranda, the son sitting close to it. When the bier is ready the body is taken outside of the house and washed, and betelnut, betel leaf, basil leaf, and sometimes a little gold are dropped into the mouth, and the body is laid on the bier. It is covered with a new cloth, to one of the corners of which a handful of rice and a copper coin are tied. The son puts on the father's turban, takes in his hand a pot with burning cowdung cakes, and walks in front of the body never looking back. The unmarried dead are tied to a bamboo not carried on a bier. The burying ground in by itself outside of the village. On the way, the bier is laid on the ground, a few stones are gathered, the rice and the copper which were tied in the cloth are laid under the stones, and the bearers change places, and turn the body so that the head faces the opposite direction from what it faced before. The grave is about five feet deep, two feet broad, and about five feet long. The chief mourner loosens the body from the bier and goes to a neighbouring stream and bathes with his turban on. He then goes to the grave and squeezes one end of the wet turban so that the water drops into the dead mouth. He then breaks the corpse's waist-string, beats his mouth with his hand, and crying aloud comes out of the grave and throws earth over the body and large stones and thorns are laid on the grave. [Some Ramoshis make tombs over their forefathers. They pay a mason £1 to £1 4s. (Rs. 10 - 12) to carve an image of a man or a horse with a weapon in his hand. The funeral

party go to a stream to wash their feet or bathe, and return home each carrying in his hand a few blades of durva grass. On reaching the house, a lamp is shown to them and they sit down and throw the grass on the housetop. Next day all of them go to the grave taking cowdung and urine. The cowdung is spread over the grave and the urine is sprinkled over it, and the grave made clean. The son bathes and fills with water the pot which held fire on the previous day, sets it on his shoulders, and piercing it with five holes lets the water trickle on the ground as he walks round the grave. He dashes the pot on the ground at the head of the grave and calls aloud beating his mouth with his hand. He shaves his head except the top-knot and his face except his eyebrows. Rice is boiled, and each person present lays small balls and a little butter on leaves near the grave. They watch till a crow eats from one of the leaves. Then they go home each carrying a few blades of grass. The mourning lasts for only seven days. Relations are told of the death and come to the house of mourning on the seventh day. A goat is killed and a dinner is given. The four bearers and the chief mourners eat from the same dish. The Jangam or Brahman is given alms including some fruit or vegetable which the chief mourner has determined not to eat during the year in honour of the deceased. The guests give the chief mourner 1s. to 10s. (Rs. ½-5) and a new turban is bound round his head.

The Ranioshis have four chiefs or *naiks* and a head chief or *sarnaik*. The head chief is a Maratha, Tatia Sahib of the Jadhav clan, who marries with Marathas but comes to Ramoshi weddings. The naiks settle caste disputes and hear charges of breaches of caste rules. The commonest breach of rules is eating with Mhars and Mangs and other classes with whom a Ramoshi ought not to eat. The whole caste ought to be present at the meeting and the four naiks and the sarnaik ought to preside, hear the charge and the answers, and settle the case. The hearing of disputes used to go on for days and the expense of feeding the meeting was met by one of the headmen and recovered from the fines inflicted on offenders which were sometimes as high as £5 to £10 (Rs. 50-100). Such heavy fines are not now levied. The people are poorer and there are seldom big disputes. The heads are still asked to settle disputes about the crests or devdks of different families, and at marriage dinners they distribute the liquor. Otherwise the heads have little power.

They do not send their boys to school. When a child is seven or eight years old he must steal something. If he goes to prison the people are delighted, fall at his feet when he comes out, and are anxious to get him to marry their daughters.

THAKURS.

Tha'kurs, or Lords, are returned as numbering 5643 and as found over the whole district, especially in Junnar and Khed. They have no story of their origin and have no memory of any earlier place of abode than Poona. The name suggests that they are a hill-tribe who at some past time were joined by Rajput fugitives and have a strain of Rajput blood. Their surnames are the same as those of Marathas, Gaikwad, Jadhav, Kamble, Shelke, and Shinde. People with the same surname do not intermarry. The names of both men and women are the same as Maratha names. They are a dark somewhat stuuted tribe, but it is often not easy to distinguish a Thakur from a Koli or a West Poona Kunbi. The men wear the top-knot and moustache and some wear whiskers and the beard. Their home tongue is Marathi. They live in small huts with low mud and stone walls and thatched roofs, and have metal and earthen vessels. Their food is *jvari*, savi, nachni, bajri, fruits, roots, herbs, spices, fish, the flesh of sheep goats hare deer and the wild hog, and liquor. The men wear a loincloth, a waistcloth, a blanket, and a piece of cloth or a Maratha turban wound round the head. The women wear the robe drawn tightly back between the legs and wound round the waist leaving most of the leg bare. They sometimes leave the breast bare and sometimes cover it with a scanty bodice and bead necklaces. Except a, few of the well-to-do who have gold, ornaments, their jewelry is of brass and tin. They are a hardworking people and work as husbandmen and labourers, and gather and sell firewood and hay and sometimes fruits and roots. They say they worship Brahma, Vishnu, and Shiv, and all other Hindu gods, and keep their feasts. Their priests are Deshasth Brahmans. They have great faith in the Tiger god or Vaghya, and believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlncky days, and consult oracles. On the fifth day after the birth of a child they dip a hand in red-powder water and make the mark of a hand on the wall of the mother's room and worship it offering it a goat or a cock. They name the child on the twelfth day. Their girls are married before they are sixteen and their boys before they are twenty-four. The offer or asking in marriage, magni, comes from the boy's side and is the same as among Marathas. The day before the marriage the boy and girl are rubbed with turmeric at their homes. On the marriage day the boy, either seated on horseback or on foot, goes to the girl's house accompanied by male and female relations, friends, and music. At the girl's house marriage-coronets or bashings are tied round the heads of the boy and girl and they are made to stand face to face and a cloth is held between them. The Brahman priest repeats verses and at the end throws grains of rice over their heads and they are husband and wife.

A feast is held and the guests go back to their homes. Next day the boy goes in procession with his wife to his father's and the marriage ceremony ends with a feast. They bury the dead and feed crows in their honour. They have a caste council and decide social disputes at meetings of the castemen. They do not send their boys to school and are poor.

VADARS.

Vadars are returned as numbering 2677, and as found over the whole district. Their origin is unknown, but their names and home speech show that they are of Telugu extraction. Details are given in the Bijapur Statistical Account. They say they came into the district twenty-five or thirty years ago, but from where they cannot tell. The names in common use among men are Babu, Chima, Hanmant, Naga, Piraji, Topaji, and Timana; and among women Baya, Sataya, Tima, Yama, and Vasari. Their surnames are Jadhav, Nalvade, Pavar, and Shelvade. Persons bearing the same surnames cannot intermarry. Their family deities are Ellamma, Janai, Satvai, and Vyankoba of Giri. Vadars include three divisions, Gadivadars or cartmen, Jate-vadars or grindstone men, and Mati-vadars or quarrymen. These three classes eat together but do not intermarry. Their home speech is a corrupt Telugu and their outdoor speech Marathi. As a class they are dark, tall, strong, and well-made. The men shave the head except the top-knot and the face except the eyebrows moustache and whiskers. Some live in one-storied houses with mud walls and tiled or thatched roofs, and many in bamboo huts thatched with the grass called survadi. Their houses are very dirty. Their belongings include cots, blankets, boxes, and metal and earthen vessels. They have no house servants, but own cattle, asses, pigs, and poultry. They are moderate eaters and good cooks. Their staple food is Indian millet bread, pulse, and onions. On Sundays, Tuesdays, and Saturdays they always bathe before their morning meal. They may use animal food and liquor on any day. They east pork and rats and are looked down on by Maratha and other middle-class Hindus. The women tie their hair in a knot at the back of the head, and wear a robe which hangs from the waist to the ankle without having the skirt drawn back between the feet. A Vadar woman who wears a bodice is turned out of caste. The men wear a waistcloth or a loincloth or a pair of tight drawers, a coat or a shirt called bandi, a Maratha turban, and a pair of sandals or shoes. Women wear no earrings. Their usual ornaments are toe-rings or *jodvis*, a nose-ring called *moti*, and silver wristlets called *gots*. As a class they are dirty, hardworking, irritable, thrifty, and hospitable. They are stone-cutters and quarry men, and some are contractors who supply stones for

public buildings. The Mativadars or earth-men carry on their asses the earth wanted for buildings, repair rice dams, and take earthwork contracts on roads and railways. During the fair months they are well employed. They are excellent workers, almost always working by the piece. A family of five spends 8s. to 16s. (Rs. 4-9) a month on food and 10s. to 16s. (Rs. 5-9) a year on clothes. A Vadar's hut or cottage costs 10s. to £5 (Rs. 5-50) to build and their house goods are worth £2 to £7 10s. (Rs. 20-75). A birth costs 4s. to 10s. (Rs. 2-5), a marriage £2 10s. to £10 (Rs. 25-100), and a death 10s. to 14s. (Rs. 5-7). They worship local gods. Their family deities are Ellamma, Janai, Satvai, and Yyankoba of Giri. They keep the usual Brahmanic holidays and fasts. They believe in witchcraft, soothsaying, and evil spirits, but they say they are not troubled by ghosts, as the pork which they eat and keep in their houses scares ghosts. Child-marriage, widowmarriage, and polygamy are allowed and practised. When a woman is brought to bed, a Vadar woman cuts the child's navel cord and is given a pair of glass bangles. On the twelfth a Brahman priest names the child and is paid 2d. (1 1/3 as.). Ceremonial impurity lasts fifteen days. After a fortnight and before the end of the fourth month, a clay idol of Satvai is made and the mother lays before the image turmeric powder, vermillion, and flowers; frankincense is burnt, and a goat is slain. A cocoanut, a copper coin, wheat cakes, pulse, and pot-herbs are laid before the image, and a cradle is hung over it. In a day or two the head of the child is shaved, and the caste-people are treated to liquor and meat. Boys are married between three and twenty-five and girls between three and eighteen. When the parents of the boy and girl have agreed to the marriage terms the boy's father pays 10s. (Rs. 5) to the girl's father, and after; day or two a caste feast known as the sakharpan or sugar and betel feast is given. At noon on the Saturday after the priest has named the lucky day for the wedding, they lay flowers, vermillion or sandal, rice, sugar, and a cocoanut before their family gods. They have no separate marriage guardians or devaks. Booths or porches are raised before the boy's and girl's houses with a branch of the wild fig or *umbar* tied to one of the posts and worshipped by the *karavali*, who is the sister either of the bridegroom or bride. At their own houses five threads, twisted into a cord and smeared with turmeric powder, are passed round a turmeric root and tied to the wrist of the boy and the girl. Some of the turmeric powder is rubbed on the boy, and the rest is sent with music and women to be rubbed on the girl. The bridegroom is dressed and with music, friends, and kinspeople is taken to the girl's village Maruti. From Maruti's temple, his brother is sent in front to the bride's and brings back a suit of clothes for the bridegroom. The boy is then brought to the bride's booth, a piece of bread is waved round him, and thrown away as an

offering to the evil spirits. He passes into the booth and is seated on a blanket spread on the ground with his bride before him face to face. They are rubbed with turmeric paste five times and are husband and wife. The guests throw lucky rice or mangalakshats over them saying in a loud voice Savadhan, Be careful. Their brows are marked with vermillion and rice, and copper coins are waved round them. They are bathed by five married women, and dressed in dry clothes. On the next day and the day after the couple are bathed in hot water and dressed, and friends and kinspeople are feasted. They go to Maruti's temple on foot, burn frankincense before him, and break a cocoanut in his honour. Each unties the other's thread wristlet or kankan and they are taken to the bridegroom's with music and kinspeople, and the whole ends with a caste feast. When a girl comes of age she sits apart for three days, and her lap is filled with a cocoanut and fruit. On the twelfth or thirteenth day the girl and her husband receive presents of clothes from their fathers-in-law and she joins her husband. They bury their dead and mourn twelve days and on the thirteenth treat the castepeople to a cup of liquor. They form a united community and settle caste disputes at meetings of the castemen called panchas. They do not send their boys to school or take to new pursuits. They are a poor class.

VANJARIS

Vanja'ris, or Grain-dealers, are returned as numbering 2606 and as found all over the district. They have no story of their origin and no memory of former settlements or of the reason or the date of their settling in Poona. They belong to two classes, Marathi and Kongadi Vanjaris, who dine together but do not intermarry. The surnames of the Maratha Vanjaris are Andhle, Darode, Ghule, Palane, Sabale, and Thorave. The names in common use among men are Rambhau, Sakharam, Satvaji, and Tukaram; and among women Bhagirathi, Bhima, Gangabai, Rahi, and Raji. As a class they are tall, strong, wellmade, and dark. The men shave the head except the top-knot and the face except the moustache and whiskers. Their head hair is long and black and the face hair thick and short. They speak Marathi both at home and abroad, and live in houses with walls of brick and stones and tiled roofs. Their furniture includes cots, cradles, boxes, carpets, blankets, and metal vessels. They own cattle and keep hares and parrots as pets. They are moderate eaters and their staple food includes pulse, rice, vegetables, and Indian millet bread. A man spends on his food $2\frac{1}{2}d$. to 3d. (1\frac{1}{2}-2 as.) a day. They are careful to bathe before they take their morning meal. Caste feasts are given in honour of marriage and other ceremonies. When they can afford it

they eat the flesh of goats, fish, poultry, deer, and hare. They drink liquor, smoke hemp-flower or gania, and eat opium. The men wear a waistcloth, a shouldercloth, a shirt or bandi, a turban, and Deccan shoes. The women plait their hair into braids and wear a bodice with a back and short sleeves and the full Maratha robe whose skirt is drawn back between the feet. Neither men nor women have any store of fine clothes for holiday wear, but give their usual clothes a special washing. As a class they are dirty, hardworking, frugal, irritable, and hospitable. Their chief hereditary calling is carrying rice, pulse, and other grain on pack-bullocks. Since the opening of cart roads and railways the packbullock trade has much declined and many have had to seek other employment. Some are husbandmen and some constables and messengers, some deal in fodder, and some deal in wood. Of those who have taken to husbandry some show much skill both in field-work and in gardening, and others deal in milk and clarified butter. Their women help in hoeing and cutting grass and their children in watching and bird-scaring. As a class the Vanjari landholders are not prosperous. They can borrow on their personal credit £20 to £50 (Es.200-500) at yearly rates varying from twelve to thirty-six per cent. A Vanjari eats from no one but a Brahman or a Maratha. They rank themselves with Marathas but Marathas look down on them and object to dine with them. Vanjaris are religious. Some worship Shiv and others Vishnu, but their chief objects of worship are their family deities Bahiroba, Bhavani, and Khandoba. Their priest is a Deshasth Brahman, whom they call to their houses during their marriage death and other ceremonies. They make pilgrimages to Alandi, Jejuri, Pandharpur, Singanapur, Tuljapur, and other sacred places. They keep the fasts and feasts observed by other Brahmanic Hindus, and fast on ekadashis or lunar elevenths. They have no special guide but most of them become the disciples of some Gosavi. Their women and children occasionally suffer from spirit possession. When they think that any sickness has been caused by spirits an exorcist or deverishi is called in who repeats some verses and waves a lemon and a fowl round the possessed person's head and drives out the spirit. When a woman is in labour a midwife is called. She comes and prepares a place for bathing the woman. She cuts the child's navei cord and buries it under the spot where the woman was bathed and the mother is laid on a cot. On the fifth day a cocoanut and lemon are laid on a grindstone and worshipped by men who sit up the whole night. The ceremonial impurity lasts for ten days. On the twelfth Satvai is worshipped and the child is named by elderly persons in the house. Between the time when a boy is twelve months and three years old, the hair-cutting or javal takes place. If the child is the subject of a vow a goat is sacrificed in the name of some god. The child is seated in its maternal

uncle's lap in the presence of a company of friends and relations. After the hair has been clipped the head of the child is shaved except a small tuft or *shendi* on the top of the head. New clothes are given to the child and friends and relations are feasted.

The offer of marriage comes from the boy's side. The boy's father goes with some friends to the girl's house and asks her father whether he will give his daughter in marriage to his son. If the father agrees a formal offer is made. Then follow as among other Marathas the turmeric-rubbing, the installation of the wedding-guardian or devak, and the making of wedding porches. On the marriage day the bridegroom is dressed in new clothes, a marriage ornament called bashing is tied to his brow and he is taken on horse-back with friends and music to the temple of Maruti in the girl's village. The bridegroom is seated in the temple and his brother mounts the horse and goes to the bride's. Her father gives him a turban and scarf and these he takes to the temple and gives to the bridegroom to wear. Then the bridegroom is seated on the horse and led to the bride's. He is taken into the wedding porch and made to stand on a carpet or sacking. The bride is led out and is made to stand facing the bridegroom. A piece of cloth is held between them, the Brahman priest hands to the guests rice mixed with turmeric powder, and gives the bride and bridegroom a roll of betel leaves to hold. He then recites the wedding verses ending with Siva lagna, savadhana, May the wedding be lucky, Beware. He throws lucky rice five times over the couple, and the guests throw the rice which they have in their hands. Then the couple are seated and the bridegroom ties the lucky thread round the bride's neck. The washerman brings a piece of fresh-washed white cloth. This is cut in two and in each part a turmeric, betelnut, and cloves are rolled and one is fastened round the right arm of the bridegroom and the other round the right arm of the bride. When the couple are seated on the altar the priest lights a sacred fire. When the fire is kindled and verses have been read the couple each in turn throw clarified butter and rice into the fire. Then the guests wave copper coins round the bride and bridegroom and throw them away. The skirts of the boy's and girl's robes are knotted together and they go and bow to the family gods. When the worship of the house gods is over they fall at the feet of the bride's mother, who unties their clothes. The day ends with a feast. On the day after the wedding a second caste feast is given. On the third day the bridegroom and the bride are bathed and made to dine from the same dish in the presence of friends and relations. The quests as on the wedding day wave copper coins round the bridegroom and the bride and throw them away. The coppers are given to the priest or the pipers, or they are changed into silver and

made into finger rings for the bride and bridegroom. Then with music the bride and bridegroom start in procession for the bridegroom's house, where a feast of cakes and flesh is given and the wedding guardian or *devak* is bowed out. When a girl comes of age she sits by herself for four days and on the fifth she is bathed. On the sixteenth the girl's father with music fetches her husband and asks him to put fruits and nuts into the girl's lap and presents the girl with a robe and bodice and her husband with a turban. The day ends with a feast. The Vanjaris have no pregnancy ceremony. When a Vanjari dies his friends and relations or caste-people meet and prepare a bier. A fire is kindled and some water is heated in a new earthen pot. The body is taken out of the house, bathed in hot water and dressed in a loincloth, laid on the bier, and covered with a new white cloth. Then the chief mourner starts carrying the fire-pot and the bearers follow. On the way to the burning ground they rest the bier, lay on the ground a copper coin and some rice, change places, and carry on the body to the burning ground. At the burning ground they lay down the bier and unfasten the body. The chief mourner has his face, including the moustache, shaved, washes in cold water, and with the help of others begins to heap up the funeral pile. When the pile is ready the body is laid on it and the chief mourner squeezes some water into the dead mouth and kindles the pyre. When the body is nearly consumed the son walks thrice round the pyre with the dripping earthen water jar, dashes it on the ground, beats his mouth, and cries aloud. All go to the river to bathe and return to the house of mourning in wet clothes. At the house of mourning they are given some *nim* leaves to eat. They then look at the lamp which has been set over the place where the deceased died and go to their homes. On the third day the chief mourner, accompanied by a priest and a few relatives, takes a winnowing basket and two or three small earthen pots, with milk, curds, clarified butter, and cow's urine, and five millet cakes, and goes to the burning ground. At the burning ground the cow's urine, milk, and curds are poured over the ashes, which are gathered in a blanket and thrown into the river. Milk, curds, and cow's urine are again poured over the place where the ashes were, and two earthen jars are set where the head lay and one where the feet lay when the dead was burned. The jars are filled with water and covered with the five millet cakes, and worshipped with flowers and sandal powder. When this is over the winnowing basket is thrown away and the people return home. Ceremonial impurity lasts ten days. On the tenth, ten balls of wheat flour are prepared and worshipped and one is offered to the crows and the rest are thrown into the river. After a crow has touched the ball the mourners bathe and go home. On the eleventh, they wash their clothes and cowdung the house where the death took place. On

the twelfth and thirteenth caste feasts are given when relations present the chief mourner with a mourning suit or *dukhavata*. A shraddha or mind-feast is performed every year in September. There is no single community of Vanjaris. Each group holds meetings and settles social disputes without any headman. Offences against caste rules are punished by fines varying from 3*d*. to 2s. 6*d*. (Re. ¼-1¼). If a man refuses to pay the fine, he is put out of caste and not allowed back till he has given a caste feast. Both boys and girls are sent to school and kept there till they are about twelve. Some of them take to new callings and their prospects on the whole are good.

DEPRESSED CLASSES

Depressed Classes included four castes with a strength of 90,281 (males 43,827, females 46,454) or 10.62 per cent of the Hindu population. The following table gives the details:

POONA DEPRESSED CLASSES.

| Division. | Males. | Females. | Total. | DIVISION. | Males. | Females | Total. |
|------------|--------|----------|--------|-----------|--------|---------|--------|
| Dhors | 550 | 554 | 1104 | Mangs | 6694 | 6926 | 13,620 |
| Halalkhors | 512 | 492 | 1004 | - Total | 43,827 | 46,454 | 90,281 |
| Mhars | 36,071 | 38,482 | 74,553 | | | | |

DHORS.

Dhors are returned as numbering 1104 and as found over the whole district except Purandhar. They have a tradition that they came into the district from Nasik about a hundred years ago. The names in common use among men are Bhau, Devba, Kushaba, Namaji, Rama, Sakru, and Vithu; and among women, Chimana, Giraja, Kusa, Mukta, Manjula, Saguna, and Vitha. *Baji* and *rao* are added to men's names and *bai* to women's names. In addressing elders the respectful term *tiravanji* is used. Their surnames are Gavare, Kalamkar, Narayane, Rapiri, Sadaphale, Salunke, Sinde, and Trimak. Persons bearing the same surnames cannot intermarry. They have no divisions. Their family gods are Bahiroba, Bhavani of Kondanpur and Tuljapur', Janai, Khandoba of Jejuri, Mahadev, and Vithoba of Pandharpur. They look like Marathas and speak a corrupt Marathi both at home and abroad. A Dhor may be generally known by his red fingers, stained by the dye he uses in making leather. As a class they are dark, middle-sized, and

well-made. The men shave the head except the topknot and the face except the moustache and whiskers. They live in common and generally dirty one-storied houses with brick walls and tiled roofs. They have no house servants, but own cattle and pet animals. Their staple food is Indian millet bread, rice and chopped chillies or potherbs. They usually bathe before their morning meal, worship their family gods, water the sweet basil plant before their door, and offer the gods food cooked in the house. At their marriage feasts they have stuffed cakes or *puranpolis*, rice-flour cakes fried in oil called *telachis*, and boiled mutton. They eat the flesh of the sheep, goat, deer, hare, wild pig, pigeon, and poultry, and on holidays drink country liquor or European spirits. They drink to excess, take opium, drink bhang or hemp-flower, and smoke tobacco and hemp-flower or ganja. The women tie their hair into a knot at the back of the head and never wear flowers or false hair. Both men and women are clean and neat in their dress. The men wear a loincloth or a waistcloth, a shirt or bandi, a shouldercloth, a Maratha turban, and a pair of sandals or shoes. The women dress in a robe hanging like a petticoat from the waist to the ankles, and a bodice with a back and short sleeves. Neither men nor women have a special set of clothes for holiday wear; they give their every-day clothes a special washing. They buy their clothes in Poona and other district towns. As a class Dhors are dirty, hardworking, orderly, thrifty, goodnatured, and hospitable. Their principal and hereditary calling is tanning hides. They buy skins from Mhars, and steep them for four days in an earthen pot filled with lime-water. On the fourth they take them out and put them in boiled water mixed with pounded babhul bark and hirdas or myrobalans. After being left three days in the water they are taken out and dried in the sun. The women help the men in preparing the lime and babhul bark water and mind the house. Most Dhors carry on their trade with their own capital. Tanning is brisk all the year round, but the cold weather is better than the hot, as in hot weather the skins rot quickly when dipped in water and are often spoiled. The Dhors do not rest on any day in the year except Shimga or Holi in March-April and Dasara in September-October. In spite of good earnings most of them are in debt, borrowing £2 10s. to £10 (Rs. 25-100) at twenty-four per cent interest to meet marriage and other charges, and being seldom able to clear off their debts. Some of them work as labourers and live from hand to mouth. They rank one degree higher than Mhars and eat from the hands of Brahmans, Marathas, and Lingayats. The Dhors are a religious class. Their family deities are Bahiroba, Bhavani of Tuljapur and Kondanpur, Janai, Khandoba of Jejuri, Mahadev of Signapur, and Vithoba of Pandharpur. Their priest is a Jangam, who officiates at all their ceremonies; at the same time they pay great respect to Brahmans.

They are worshippers of Shiv and hold him in special reverence. They keep the usual Brahmanic and local holidays and fasts, their great days beings Navaratra in September-October and Shivaratra in January-February. Their religious teacher is a slit-eared or Kanphatya Gosavi, who visits their homes and receives a vearly tribute either in cash or in clothes. They worship the usual Brahmanic and early village gods, boundary gods, and local gods, and believe in witchcraft, soothsaying, and evil spirits. When any one is possessed by an evil spirit they call in a *devarishi* or seer skilled in incantations and charms. The seer visits the sick person, burns frankincense before him, repeats a charm over a pinch of ashes, and rubs the ashes on the sick person's brow, waves a cocoanut round his head, sacrifices a goat or a cock, and the sick recovers. Early marriage widow-marriage and polygamy are allowed and practised; polyandry is unknown. When a woman is brought to bed a midwife is called. She cuts the child's navel cord, bathes both mother and child in warm water, and lays them on a cot. The navel cord is buried under the threshold and the nurse is paid 2d. to 1\(\psi_s\). (1\(\psi_{-10}\) as.). For the first three days the child is fed on honey and the mother on rice mixed with clarified butter. On the fourth the mother suckles the child. On the fifth a gold or silver image of Satvai is placed in the lying-in room on a stone slab or pata. Some sand, prickly-pear or *nivadung*, and the knife used in cutting the navel cord are laid on the stone. The midwife or some other woman of the family lays before the image turmeric powder, vermillion, cotton thread, and redlead. Frankincense is burnt before it, and goats are slaughtered in the name of the goddess and boiled mutton is offered to her. Four stalks of Indian millet are placed at the four corners of the cot and the women of the family keep awake during the whole night. On the seventh the lying-in room is washed with cowdung and the mother is given new clothes, and is again laid on the cot. Ceremonial impurity lasts ten days. On the eleventh the house is cowdunged, and the mother is bathed and dressed in new clothes. She sets five stones outside of the door in the field and worships them with turmeric powder, vermillion, and pomegranate flowers in the name of Satvai. Lastly the goddess is offered a cocoanut and rice and pulse, and the silver image which was worshipped on the fifth is tied round the child's neck. The child is named on the fifteenth or twenty-first day, when castewomen meet at the child's house, and, after asking the inmates, lay the child in a cradle and name it. Handfuls of boiled gram, betel packets, and sugar are served and the guests leave. A boy's head is shaved for the first time between one and five. He is seated on his maternal uncle's lap, who cuts a little of the hair, and the cutting is finished by the men of the house. Goats are slaughtered and friends and relations are feasted. Betel leaves and nuts are handed and the

guests take their leave. Next day the boy's head is shared except a tuft on the crown. A hair-cutting or *javal* costs 4s. to 8s. (Rs. 2-4). They marry their boys between five and twenty and their girls between three and sixteen. As a rule the offer of marriage comes from the boy's father to the girl's father, who accepts it if in his opinion the match is a good one. On a lucky day comes the magani or asking. The boy's father with music and friends goes to the girl's and presents her with a new robe and bodice and a packet of sugar. A Jangam priest marks her brow with vermillion and she is dressed in the suit presented to her by her future father-in-law. Her lap is filled with rice and a cocoanut, and rolls of betel leaves are served to the people who are present. Marriage comes within four years of the asking day. The first sign of the wedding is the making of turmeric paste. Some of the paste is rubbed on the bridegroom and the rest with music and friends and a bodice and robe and flower wreaths is sent to be rubbed on the bride. Two days before the marriage the leaves of five trees are taken to the temple of Maruti, preceded by drummers and followed by friends and relations. They are laid before the god, brought back to the bridegroom's booth, tied to one of its posts, and made the marriage guardian or devak. Goats are slaughtered and friends and kinspeople are asked to dine. On the marriage day leaves of the same five trees are with the same ceremonies tied to a post in the bride's booth and a marriage altar or bahule is raised. The bridegroom is seated on horseback and led in procession to the temple of Maruti in the bride's village. His brother or vardhava goes in front to the house of the bride and returns with a turban for the bridegroom, whose head is decked with a brow-horn or bashing and he is brought with pomp to the house of the bride. At the entrance to the booth, rice mixed with curds is waved round him and is thrown as an offering to evil spirits. He passes into the booth and is seated in a bamboo basket with the bride standing fronting him in another basket hid by a curtain or jamanika. A Jangam and a Brahman repeat lucky texts or mangalashtaks and throw lucky rice or mangalakshata over the couple. Five cotton threads are twisted into a cord and bits of turmeric are tied to each of its ends. It is cut in two and one-half fastened round the bridegroom's right wrist and the other half round the bride's left wrist. The priest lights the hom fire. Bound the bride's neck is fastened the lucky necklace and she is told to walk five times round the altar with her husband. After the five turns are finished the hems of the couple's garments are knotted together, and they go to the house and lay a cocoanut before the family deities and bow before them. The bridegroom takes the cocoanut, with him and they return to the booth and are seated on the altar or bahule. Friends and kinspeople are feasted on fried rice flour cakes or telachis, and the wedding or varat procession taking the

couple to the bridegroom's house starts next morning from the house of the bride. When they reach the bridegroom's, five married women fill the lap of the bride and the couple visit the temple of Maruti and bow before the god. Next day they are robbed with turmeric paste and are bathed in warm water. Lastly each unties the other's marriage wristlet or kankan and the wristlets are thrown into a copper vessel filled with water. When a Dhor dies, he is bathed in warm water, dressed in a loincloth, and laid on a bier. A turban is put on his head and his face is covered with a piece of white cloth. The Jangam priest comes and rubs ashes on his brow, and flower garlands, betel leaves, and redpowder or *gulal* are thrown over the body. The son or the chief mourner holds in his hand the fire-pot and starts for the burying ground followed by the bearers. On the way they stop, set down the bier, leave some rice and a copper coin near by, change places, lift the bier, and go to the burying ground. A pit is dug and the body is lowered into the pit in a sitting position. The right hand is laid on the left hand and the pit is filled with earth. The Jangam drops bel leaves over the grave and says that the dead has become one with Shiv. All bathe and each gives the Jangam a copper coin and he rubs their brows with ashes. On returning to the house of mourning they cleanse their months, eat a *limb* tree Melia azadirachta leaf and go home. On the third day they go to the burial ground with a winnowing fan containing three small cakes of wheat flour rubbed with clarified butter, cocoa-kernel, molasses, and three small earthen pots filled with cow's milk, cards, and cow's urine. A cake is left at the rest-place or visavyachi jaga where the body was rested. The two other cakes, with the pots of milk and curds, are set on the grave, and the ground is sprinkled with cow's urine from the third pot. The party bathe and return home. They mourn the dead ten days. On the tenth, the face of the son or chief mourner is shaved except the eyebrows, and as directed by the Jangam priest he prepares ten wheat-flour balls. Of the ten balls nine are thrown into water and the tenth is given to a crow. On the eleventh friends and kinspeople are feasted. Nothing is done on the yearly death-day, but the dead is remembered on the lunar day that corresponds to the day of death in the *Mahalaya Paksha* or All Souls fortnight in dark *Bhadrapad* or August-September. A death costs about £1 10s. (Rs. 15). Dhors form a united social body. Social disputes are settled at meetings of castemen. Smaller breaches of caste rules are condoned by fines varying from 6d. to 10s. (Rs.¼-5) or by caste feasts. Some send their boys to schools, where they remain till they are able to read and write. They take to no new pursuits and have still hardly recovered from the 1877 famine.

HALALKHORS.

Halalkhors are returned as numbering 1004, and as found over the whole district except Khed and Indapur. They are known as Halalkhors or all-eaters, Bhangis perhaps bamboo-splitters, Dhedis or Gujarat tanners, and Mhetars or princes. They are also called Lal Begis or the followers of Lal Beg, their religious head or quru. According to the Hindu books Halalkhors are the offspring of a Shudra father by a Brahman widow. They may have been recruited from bastards and other unfortunates, but the basis of the class seems to be degraded Indian Rajputs. Their traditional founder is Suparukha who belonged to one of the eighty-four castes whom the god Ram once invited to a feast given by his wife Sita who had cooked different dishes with her own hands. Suparukha instead of eating each dish separately mixed all the dishes into one mess and ate it in five mouthfuls. Annoyed by his want of manners Sita said to him, 'You will henceforth eat food mixed with dirt; you will live on the refuse of food thrown into the street; you will take to the lowest callings; and instead of associating with you people will shun you. 'They say they came to Poona from Gujarat during the Peshwa's supremacy. They are divided into Lal Begs and Shaikhs, who eat together and intermarry. Their commonest surnames are Araya, Baraya, Chan, Madya, Manji, and Memdabadi; people with the same surname do not intermarry. The names in common use among men are Bapu and Khushal; and among women Aka, Baina, Bhima, Hima, and Rama. The men wear the moustache, some wear the top-knot, and others whiskers and the beard. The women tie the hair in a ball behind the head. Their home speech is a mixture of Hindustani Gujarati and Marathi. They live either in wattle and daub huts or in houses with mud walls and tiled roofs, and have a cot, a box, earthen and metal vessels, blankets, carpets, and guilts. Their broom and basket are kept either outside or in the house in a corner in the front or back veranda. They are fond of parrots, dogs, and other pets, and keep goats, pigeons, ducks, and domestic fowls. They eat the leavings of all, whether Hindus or Musalmans, and their staple food is millet rice, wheat, split pulse, vegetables, and occasionally fish and the flesh of goats, sheep, and domestic fowls. They do not eat the flesh of a hare because Lal Beg was suckled by a female hare. They smoke tobacco, hemp, and opium, and drink liquor. At their marriages they give feasts of sugared rice or sakharbhat, split pulse and rice or dalbhat and khichdi, mutton rice or pulav, wheat cakes and wheat and sugar called shirapuri, sweetmeats or anarse and karanja shevaya or vermicelli, and mutton. Their holiday dishes during Shravan or August are shirapuri and khichdi, in the Divali holiday in November karanja and anarse sweetmeats, and during Shimga vermicelli and sugared rice. They seldom have holiday or marriage dinners without flesh and liquor. The men dress in a loincloth, trousers, or waistcloth, headscarfs

of different colours, or a Maratha turban, a jacket, a coat, and English or native shoes, and they carry a silk handkerchief carelessly wound round the neck or thrown over the shoulders generally with silk and silver tassels at the corners. The women wear either the petticoat bodice and head scarf or the robe reaching to the knee with the skirt drawn back between the feet and a small tight-fitting bodice with short sleeves and no back. They are generally sluggish, weak, timid, and drunken, but honest and orderly. The men are fond of show and pleasure. When a Halalkhor is in his holiday dress, it is almost impossible to say to what caste he belongs. They are scavengers and nightsoil men cleaning the town from morning to eleven. Before starting on their day's work they bow to the basket and broom, and on Dasara Day in October burn frankincense before them, and offer them flowers, blades of rice, and apta leaves. Children begin to learn at eight and are expert workers at sixteen, though they seldom begin the heavy head-carrying work before they are eighteen or twenty. Boys earn 14s. (Rs. 7) a month, women 16s. (Rs. 8), and men 18s. to £1 10s (Rs. 9-15). A family of five spends 14s. to 18s. (Rs. 7-9) a month on food and £1 to £2 (Rs. 10-20) a year on clothes. Their houses cost £10 to £20 (Rs. 100-200) to build; their furniture and goods are worth £2 to £4 (Rs. 20-40); their animals and birds £2 to £3 (Rs. 20-30); and their clothes and ornaments £5 to £20 (Rs.50-200). A birth costs them 2s. to 8s. (Rs. 1 -4); the marriage of a son £10 to £15 (Rs. 100-150); the marriage of a daughter 10s. to £1 (Rs. 5-10); and a death £1 (Rs. 10). In religion they are half Musalmans half Hindus, going to mosques and repeating prayers and at the same time having as family deities Khoriyal of Gujarat, Khandoba of Jejuri, Khajapir, Baba Makdumba, and the goddesses Kalsari and Ghochati. They pay equal respect to Musalman saints and to Hindu gods and offer them fowls whose throat has been cut by a Musalman. Their priests are the strange half-Hindu half-Musalman Hussaini Brahmans who officiate at their weddings. They keep both Hindu and Musalman fasts and festivals. Their special day is the *chhadi navmi*, which falls in the month of Shravan or August. This is the anniversary of the death of Joherpir, a royal saint who lived during the reign of Firozsha, the Emperor of Delhi (1356-1388), and worked miracles. One day Joher's cousins entered his country with a large army and called on him either to fight or pay them half his revenue. Joher's mother advised him to agree to their demands. But he attacked the army single-handed and killed the leading traitor. On his return his mother instead of praising him ordered him to leave her presence, and he enraged at her behaviour, stamped on the ground and was swallowed up. On the day when Joher disappeared Hindus do not object to touch Halal-khors. Many of the Halalkhors make vows at Joher's shrine and some weep

for the saint and lash themselves with ropes, but by the power of the saint suffer no harm. Their religious teachers or *gurus* are either men of their own caste or belong to the school of Nanak-panthi beggars. The teacher tells the disciple a mantra or text. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. It is considered lucky to meet a Halalkhor, especially when he has a full basket on his head. On the third day after the birth of a child they ask their priests for a name and call the child by the name he suggests. On the fifth day they cowdung a spot of ground near the mother's cot and spread a child's bodycloth or balote over it. On the cloth they lay a millet cake and a ball of tamarind flowers, molasses and butter, and the midwife, who is generally of their own caste, worships them as the goddess Chhati. They keep awake all night to prevent the goddess carrying off the child. A family in which a birth takes place is considered impure for eleven days, during which they do not touch their caste-people. On the twelfth day the mother and her child are bathed, the house is cowdunged and sprinkled with cow's urine, and the clothes are washed. The mother takes the child in her arms and with a few near relations goes to some distance from the house and lays five pebbles in a line on the ground, worships them, offers them cooked rice, mutton, and liquor, and retires with a bow. They clip a child's hair when it is a month and a quarter to three months old, the clipping being performed by the child's maternal uncle, who is presented with a cocoanut They marry their girls between seven and twelve and their boys before they are twenty. The asking comes from the boy's house, and when the match is settled both fathers put sugar into one another's months. A few days before the marriage the girl's father gives a feast to the boy's relations, when sugared rice or sakharbhat is prepared. The girl is presented with a new robe and bodice and a flower garland is hung round her neck, betelnnt leaves and cheroots are handed round and the guests retire. A couple of days before a marriage a dough image of Ganpati is made and is put in a new earthen jar and worshipped by the house women and hung in a coir sling some where in the house. An image of Ganpati is traced with red paint on a wall in the house and worshipped by the women. The boy and girl at their respective houses are seated on low wooden stools and rubbed with turmeric by the women of their family. The day before the marriage a feast is held at both the boy's and the girl's houses, and a gel fruit, Gardenia dumetorum, is tied to the right wrists of both the boy and girl. On the marriage day the boy accompanied by kinspeople friends and music, goes either on horseback or on foot to the girl's, where her mother marks his brow with redpowder or kunku, throws grains of rice over his head, leads him into the marriage porch, and seats him on a square mango bench

or macholi. The girl is then led out by he mother and seated on a guilt close to the boy. In front of them a square is traced, a new earthen jar is set on each corner of the square, and cotton thread is passed five times round the jars. The priest lights a sacrificial fire in front of the boy and girl, and the boy and girl throw grains of rice over the fire and the jar. The mother or other elderly woman ties the hems of their garments together, and they go round the earthen jars four times and take their seats as before The priest repeats marriage verses or mangalashtaks, and when the verses are ended closes the ceremony by throwing grains of rice over the heads of the bride and bridegroom. A feast is held and the boy and girl are seated on horseback and taken in procession to the boy's house. Here the boy and girl sit in front of the house gods and worship them by throwing flowers and grains of rice over them. Next day the boy and girl go on foot to the girl's and after washing their mouths toothpowder or *Datvan* is rubbed on their teeth and they are made black. A dish of vermicelli or shevaya is prepared and the boy and girl feast. The boy leaves the girl at her paresents' and returns home. A couple or four days after, the girl is taken to the boy's house and the boy's mother puts glass bangles round her wrists. The marriage festivities end with a feast at the boy's house. When a girl comes of age she is seated by herself for three days No rites are performed. When a Halalkhor dies, if a man, the body is washed at the burying ground, and, if a woman, at home. The body is carried on a bamboo bier on the shoulders of four near kinsmen. On the way to the burial ground the bier is rested on the ground, and a gram and sugar or bundi ball and copper coin are placed at the road side, they say, for the spirit of the dead. They dig a grave, seat the deceased in it, and making a small hole in front of the body place a lighted dough lamp in it. The chief mourner followed by the others pours a little water into the dead month, and after the chief mourner has thrown in a handful of earth, the rest fill the grave, bathe and go to the deceased's house. At the honse each takes a mouthful of water and after rinsing his month goes home. On the third day the chief mourner's moustache is shaved and he goes to the burial ground, lights a dough lamp, burns frankincense, and lays a flower garland on the grave. On his return home he lights another dough lamp, burns frankincense, and lays flowers on the spot where the dead breathed his last. They mourn twelve days, during which they are considered impure and do not touch their castefellows. On the morning of the twelfth day seven dough and seven rice balls are prepared and worshipped and thrown into a stream or into a pond. A caste feast at the end of a month completes the death ceremonies. Halalkhors are bound together by a strong caste feeling and settle social disputes at meetings of the castemen in presence of their headmen or *patils*. An

adulteress is fined £4 (Rs. 40), and if she becomes with child without letting any one know, she is fined £6 (Rs. 60). Before he is allowed to marry a widow the husband has to give the caste £1 8s. (Rs. 14). If a marriage is broken off after a settlement has been made the offending party has to pay the caste a fine of 10s. (Rs. 5), and on every marriage there is a caste fee of 8s. (Rs. 4). A woman who leaves her husband and lives with another man has to pay £2 (Rs. 20). They send their boys to school until they are able to read and write a little Marathi. They are a steady people.

MHARS

Mhars are returned as numbering 74,553 and as found over the whole district. They say that once when Parvati was bathing her touch turned some drops of blood on a bel leaf into a handsome babe. She took the child home and showed him to Mahadev who named him Mahamuni. One day, while still young, the child crawled out of the house and seeing a dead cow began to eat it. Mahadev was horrified and cursed the child, saying that he would live outside of villages, that his food would be carcasses, that nobody would have anything to do with him, would look at him, or would allow his shadow to fall on anything pure. Parvati, who took great interest in her child, begged her lord to have pity on him, and Shiv agreed that people should employ him to supply mourners with wood and dried cowdung cakes to burn the dead. As the child's appetite was so great he turned his name into Mahahari or the great eater. Mhars are divided into Andhvans, Daules, Ladvans, Pans, Somvanshis, Silvans, and Surtis, who do not eat together. Their commonest surnames are Bhalerao, Bhoir, Chavan, Dasture, Gaikvad Javle, Jadhav, Lokhande, Madar, Shelar, and Somvane; people with the same surname do not intermarry. The names in common use among men are Govinda, Hari, Krishna, Mahadev, Ramchandra, and Vishnu; and among women Eshoda, Ganga, Jaya, Radha, and Yamna. They speak Marathi, those who know how to read and write speaking it purely. [Among themselves they have a few peculiarities. They say nahi for nahi no, toha for tujhe thine, and nagu, or nai payaje for nko do not want.] Mhars are generally tall, strong, muscular, and dark with regular features. Most of them live outside of villages in small houses with tiled roofs and mud and brick walls. The neighbourhood of their houses is generally dirty, but the inside of the houses and the ground close to the doors are fairly clean. Except a few which are of metal, the cooking, dining, and water vessels are of earth. The well-to-do rear cattle and the poor sheep and fowls. They are great eaters of pungent dishes and their food is millet, Indian millet, rice, split pulse, vegetables, and occasionally fish. When cattle, sheep, or fowls die they

feed on their carcasses, eating strips of the flesh roasted over a fire, often with nothing else but sometimes washed down by liquor. They do not eat pork. They give feasts in honour of marriages, deaths, and anniversaries costing £ 1 to £2 10s. (Rs. 10 - 25) for a hundred guests. It is the cost and not any religious scruple that prevents them using animal food every day. They say the men bathe daily before meals, and the women once a week. They do not eat from Buruds, Mangs, Mochis, or Bhangis. They drink to excess and smoke hemp flowers and tobacco. The men dress in a loincloth, a waistcloth, a pair of short drawers or cholnas, a shouldercloth, a coat, a waistcoat, a cap, a turban folded in Maratha fashion, and shoes or sandals. They have spare clothes in store such as a turban and a silk-bordered waistcloth. The women tie the hair in a knot behind the head and wear the bodice and full Maratha robe the skirt of which they pass back between the feet. ['A well-to-do Mhar generally has a pair of waistcloths worth 2s. to 3s. (Rs. 1-1/2); a turban worth 1s. 6d. to 10s. (Rs. 34-5); two coats worth 1s. 6d. to 4s. (Rs. 34-2); two waistcoats worth 1s. 3d. to 2s. (Re. 5/8-1); a pair of shoes worth 1s. to 2s. 6d (Rs. $\frac{1}{2}$ -1 $\frac{1}{4}$); three jackets or *kudtans* for a child worth 2s. to 4s. (Rs. 1-2); two chaddis worth 6d. to 1s. (4-8 as.); a square loincloth or langoti worth $1\frac{1}{2}$. (1 a.); a cap worth 3d. to 6d. (2 - 4 as.); and a shouldercloth worth 6d. (4 as.). A woman's clothes are two robes worth 4s. to £1 (Rs. 2 -10); two bodices worth $7\frac{1}{2}$ d to 1s (5 - 8 as.); and sandals or cheplya worth 9d. to 1s. (6 - 8 as.) The ornaments worn by rich women are the earrings called bugdya worth £1 to £2 (Rs. 10-20), the gold nose ring called *nath* worth 14s. to £2 10s. (Rs. 7-25), a necklace called sari worth £1 to £2 10s. (Rs. 10-25), a gold necklace called panpot worth £1 10s. to £4 (Rs. 15-40), a gold necklace called *vajratik* worth £1 to £3, (Rs. 10-30), and a gold necklace called mangalsutra or mani worth 1s. to 4s. (Rs. ½ - 2); silver bracelets called ella worth £1 10s. to £6 (Rs. 15-60), silver gots worth 12s. to 16s. (Rs. 6-8), silver bangles worth 8s. to £1 12s. (Rs. 4-16) and belimetal anklets or *jodvis* worth 3d. to 6d. (2-4 as.). The ornaments of rich men are the gold earrings called bhikbalis worth 4s. to 10s. (Rs. 2-5) and gold antias or kudkias worth £1 to £4 (Rs. 10 -40); an armlet called *kude* worth 10s. to £2 (Rs. 5 - 20); silver finger rings called angthi worth 9d, to 2s. (Re. 3/8 - 1), and gold rings worth 2s. to 16s. (Rs. 1-8); a silver waistbelt or kardora worth £1 to £2 10s. (Rs. 10-25) and a small belt for a boy worth 4s. to 16s. (Rs. 2 - 8); an anklet of silver called *tode*, if for one leg worth £1 to £2 (Rs. 10-20) and if for two legs worth £1 to £6 (Rs. 10 - 60). They are hardworking, hospitable, honest, and thrifty, but dirty and drunken. They are village servants, carriers of dead animals, husbandmen, messengers labourers, scavengers, sellers of firewood and cowdung cakes, and

beggars. The men earn 8s. to £1 (Rs. 4-10), the women 4s. to 10s. (Rs. 2 - 5), and the children 2s. to 4s. (Rs. 1 - 2) a month. They make about 1 ½d. to 3d. (1-2 as) profit upon each 2s. (Re. 1) worth of firewood or cowdung cakes. They charge 1s. to 10s. (Rs. ½ - 5) for carrying a dead horse, 6d. to 2s. (Re. 1/4 -1) for carrying a dead cow, and 6d to 3s. (Rs. ¼ -1½) for carrying a dead buffalo. They are a steady class of people, and few of them are in debt, except some who have been forced to borrow to meet their children's wedding expenses. They have credit and can borrow 10s. to £5 (Rs. 5 - 50) at two per cent a month. They hold a low position among Hindus, and are both hated and feared. Their touch, even the touch of their shadow, is thought to defile, and in some outlying villages, in the early morning, the Mhar as he passes the village well, may be seen crouching, that his shadow may not fall on the water-drawers. To build a house costs £2 to £8 (Rs. 20-80), and to rent it 6d. to 1s. (4-8 as.). The house property varies from £2 to £7 10s. (Rs. 20-75). A birth costs 4s. to 6s. (Rs. 2 - 3), naming 2s. (Re. 1), shaving or javal 4s. (Rs. 2) and if a goat is offered 7s. (Rs. 3½), a boy's marriage £2 to £10 (Rs. 20 -100) and a girl's £1 to £2 (Rs. 10 - 20), a girl's coming of age 8s. to 10s. (Rs.4-5), a death 8s. to 16s. (Rs. 4-8) for a man, 4s. to 6s. (Rs. 2-3) for a widow, and 16s. to £1 (Rs. 8-10) for married woman. They are Shaivs, pay great respect to Mahadev, and have house images of Bhavani, Bahiroba, Chedoba, Chokhoba, Khandoba, Mariai, and Mhaskoba. They worship metal masks or taks as emblems of deceased ancestors. Their priests are the ordinary Deshasth Brahmans and in their absence vachaks or readers belonging to their own caste officiate at their marriages. They make pilgrimages to Pandharpur, Alandi, Jejuri, and Mahadev of Signapur. They keep the usual Hindu fasts and feasts. They are a religious people, and spend much of their time in reciting sacred books or hearing them read. They have singing clubs where they sing in praise of the Hindu gods. Among them both men and women sing with much skill and go in bands of two or more singing and begging. They have a religious teacher or *quru* belonging to their own caste, whose advice they are required to take. Both boys and girls before they are a year old are taken to the teacher with a cocoanut, a waistcloth, rice grains, flowers, and frankincense. The child's father marks the teacher's brow with sandal paste, worships him, and presents him with a waistcloth and 3d. to 2s. (Re. $\frac{1}{8}$ -1) in cash. The teacher takes the child on his knee, breathes into both his ears, and mutters some mystic words into his right ear. At this time either the priest covers himself and the child with a blanket or cloth, or a curtain is held between him and the rest of the people, who sing loudly in praise of the gods. They believe in sorcery, witchcraft, soothsaying, omens, lucky and unlucky days, and consult oracles.

When a person is possessed by a spirit he is seated in front of the house gods, and frankingense is burnt before him. If the patient remains sitting the possessing spirit is thought to be a Hindu bhut. When the people are satisfied that it is a Hindu bhut chilly stems and seeds are burnt before him and he is asked his name. If he does not tell his name be is slapped with shoes, his little finger is squeezed, and he is caned. In spits of this the possessed person persists in keeping silence, his case a referred to a *devrihi* or exorcist. If the possessed person speaks, the spirit is asked his name, and the reason of this body-seizing or angdharne. The spirit says ' I was hungry and it was midday, and as this man was passing at the time I entered his body.' He is asked how he will leave the sick man. The bhut says 'I want a fowl or a goat and rice.' He is asked where the food should be left for him, and answers' At the corner of the lane.' If the bhut is a female one she is called a *hadal*, and generally asks for sweet-smelling rice or ambe mohorache bhat, pickles, and butter lonkade tup; along with this are placed turmeric roots, redpowder, and betelnut or chikni supari. If the spirit is a male, curds and rice, betel leaves, and a small thick cake or damti of wheat mixed with oil, or of Indian millet mixed with pulse and oil are made ready. The cake is rubbed on one side with black: of the frying pan and on the other side with turmeric and redpowder. The cooked rice and bread are put in a leaf plate and waved over the head of the possessed and left on the spot named by the spirit. A man is sent to leave the articles at the place named, and after washing his hands and feet, and rubbing water on his eyes, he returns home. He takes a pinch of dust off his feet, rubs it between the eyebrows of the possessed person, and the spirit leaves his body. If the spirit is a Musalman spirit, hog's hair is tied in a box round the possessed person's neck, and the spirit at once leaves the body. A short time before her delivery the woman is bathed in cold water, and immediately after delivery both the mother and child are washed in hot water and laid on a blanket on the ground. The mother is fed for the first three days on rice, sweet oil, and molasses, and is considered impure for twenty-one days. On the fifth day the goddess Satvai is worshipped and a lamp is kept burning the whole night. In order that the lamp may not go out and the goddess come and steal the child, the child is watched both by the mother and the midwife. On the twelfth day the child is laid in a cradle and named, the name being given by the village astrologer. They marry their children at any time between a few months to twenty years of age and the boy's father has to give the girl's father 7s. to £2 10s. (Rs. 3½-25). Marriage ceremonies last three to eleven days. The boy is rubbed with turmeric and the rest is sent to the girl with a new robe and bodice. They have several marriage guardians or devaks. One is a silver mask or tak,

which is brought by a newly married couple from a goldsmith's shop and placed among the household gods and worshipped; another is a wooden grain measure; a third is the leaves of the five trees or panch palavs; and a fourth is a piece of bread tied to a post in the marriage hall. Their marriage customs are in most particulars the same as those of Marathas. The chief exception is that the boy and girl are made to stand in two bamboo baskets at the time of marriage and that a yellow thread is passed seven times round their necks. They bury their dead. When a Mhar is on the point of death a few drops of water in which a Brahman's feet have been washed are put into his mouth, and when he dies he is carried to the burning ground and buried sitting. A few bel leaves are scattered on his head, and the chief mourner, going thrice round the grave with an earthen water jar, dashes it on the ground and beats his month. On the third day he again goes to the burning ground, lays some cooked food for the crows, and feasts the caste on the thirteenth. The mourner is presented with a turban and the mourning is over. Mhars allow widow-marriage and practise polygamy, but not polyandry. They have a caste council and settle social disputes at meetings of the castemen. They send their boys to school. Some of them are well taught and are able to read and interpret sacred books. As a class they are poor.

MANGS.

Ma'ngs are returned as numbering 13,620 and as found all over the district. They say the founder of their caste was Maharudra son of Mahadev and that they came to the district from Hastinapur or Delhi. They have no tradition of when they came. They are probably the remnants of an early tribe of Telugu or Kanarese origin. They have no subdivisions except that illegitimate children are termed Akarmases and do not eat or marry with the rest. Their surnames are Admani, Chavan, Gaikvad, More, Sinde, and Vairagar; people with the same surname do not intermarry. The names in common use among men are Bapu, Bhagu, Ithu, Krishna, Kushaba, Laksha, and Mahadu; and among women Bhagu, Chanda, Ganga, Jai, Rakhtna, Sugana, and Tulsi. They are dark and stout with regular features. The men wear the top-knot and moustache, and sometimes the whiskers and beard. They speak Marathi. They live in houses with mud or brick walls and tiled roofs. Except a water jar and dining plate of bell metal, their cooking vessels are mostly of earth. They own sheep and domestic fowls. Their staple food is Indian millet, millet, split pulse, chillies, onions, salt, and spices. They eat fish and the flesh of sheep, goats, fowls, ducks, cattle, and hogs, but not of horses or donkeys. They drink liquor and smoke tobacco and hemp-flowers. They are

hardworking and trustworthy, but dirty, unthrifty, passionate, revengeful, and greatly feared as sorcerers. They make and sell leather ropes called *nadas* worth 11/2d. to 2s. (Rs 1/16 -1), date leaf brooms worth 36. to 4d. (4-23 as.), and slingsor shinkes worth d. to \(^4\). (\(^1\)a.) They are musicians, songsters, scavengers, husbandmen, messengers, beggars, and hangmen, and they also geld cattle. The proudest moment of a Mang's life is said to be when he hangs a Mhar, the hereditary rivals and enemies of his tribe. Formerly they did not eat from Mhars, now, excepting Halalkhors, Dheds, and Bhangis, they eat from all and think themselves antyajas, that is, the lowest of Hindus. They are Shaivs and their chief god is Mahadev. Their house deities are Ambabai, Bahiri, Janai, Khandoba, Mariai, Tuki, Vithoba, and Yamai. Their priests are ordinary Maratha Brahmans, and they make pilgrimages to Alandi, Kondanpur, Dehu, Pandharpur, and Signapur near Phaltan. They keep the chief fasts and feasts, Mahashivratra in February, Holi in March, Ramnavmi in April, Ashadhi Ekadashi in July, Gokulashtami and Mondays and Saturdays of Shravan in August Dasara in October, and Divali and Kartiki Ekadashi in November. On the fifth day after a child is born they worship a dough image of Satvai or simply five pebbles arranged in a line in the mother's room and offer them cooked rice and split pulse or dalbhat. Two dough lamps are kept burning the whole night and a feast is held. On the twelfth day seven pebbles are placed outside the house in a line and worshipped by the mother in the name of the goddess Satvai. They name the child on the same day, the name being given by the Brahman astrologer. They marry their children standing in two bamboo baskets face to face and with a cloth held between them. The priest standing at some distance repeats verses and at the end throws grains of rice over the boy and girl, and they are husband and wife. A feast is held the next day and the boy takes the bride to his house on horseback accompanied by music, kinspeople, and friends. When a sick person is on the point of death sweet milk is put into his mouth so that he may die happy. They bury their dead, and mourn thirteen days. On the morning of the thirteenth they go to the burning ground, shave the chief mourner's head and moustache, and bathe. The mourner places thirteen leaf cups or *drones* side by side, fills them with water, returns home and feasts the caste. The ceremony ends with the present of a white turban to the chief mourner. The Mangs have a headman or *mehetrya* belonging to their own caste who settles caste disputes in consultation with the adult male members of the caste. A few send their children to a Marathi school. They are a poor people.

BEGGARS

Beggars, included twenty-three classes with a strength of 10,477 or 123 per cent of the Hindu population. The details are:

POONA BEGGARS.

| DIVISION. | Males. | Females | Total. | DIVISION. | Males. | Females | Total. |
|--------------|--------|---------|--------|--------------------------|--------|---------|--------|
| Aradhis | 43 | 18 | 61 | Kolhatis | 163 | 232 | 395 |
| Bhamtas | 62 | 69 | 131 | Manbhavs | 128 | 94 | 222 |
| Bharadis | 470 | 479 | 949 | Panguls | 46 | 42 | 88 |
| Bhats | 70 | 50 | 120 | Sarvade Joshis | 811 | 812 | 1623 |
| Bhutes | 9 | 3 | 12 | Sahadev Joshis | | | |
| Chitrakathis | 71 | 77 | 148 | Tirmalis | 36 | 34 | 70 |
| Gondhlis | 313 | 370 | 683 | Vaghes and Murlis. | 5 | 16 | 21 |
| Gosavis | 2002 | 1707 | 3709 | Vaidus | 261 | 262 | 523 |
| Holars | 259 | 243 | 502 | Vasudevs | 25 | 17 | 42 |
| Jangams | 498 | 419 | 917 | Virs | 17 | 11 | 28 |
| Jogtins | | | | Total | 5399 | 5078 | 10,477 |
| Joharis | 50 | 60 | 110 | | | | |
| Kanphates | 60 | 63 | 123 | | | | |

ARADHIS.

A'ra'dhis, or Praying Beggars, are returned as numbering sixty-one and as found over the whole district. They are a mixed class of men and women and include members of all castes of Hindus from Brahmans to Mhars and Mangs. Even Musalmans are Aradhis. The men are generally tall thin and womanish, many of them either being eunuchs or copying eunuchs' ways. Those who are well-to-do have to beg, at least at five houses, once a week, on Tuesday, Friday, or Sunday and eat such food as is given them. They worship all Hindu gods and goddesses and observe the usual fasts and feasts. Their

priests are Deshasth Brahmans who officiate at birth, marriage, and death ceremonies. A childless man prays to Bhavani and vows that if she hears his prayer and blesses him with a child, it will be set apart for a religious life. Others stricken with dropsy, leprosy, or consumption vow that if they recover they will become Aradhis in honour of Bhavani. Men who are vowed to be Aradhis either by their fathers or by themselves marry with women of their own caste. Praying girls or Aradhinis are considered devoted to their patron goddess and remain single. When a man wishes to become an Aradhi, he goes to one of the brotherhood and tells him his wish. He is asked whose Aradhi he wishes to become whether of the Bhavani of Tuljapur, of Kondanpur, of Rasan, of Kurkumb, of Nhyavar, or of Chatarshingi. He names one of these Bhavanis and is advised to go and visit his patron goddess. If he is not able to undertake the journey, he is asked to bring about a pound of rice, turmeric, red-powder, betelnut and leaves, flowers and flower garlands, molasses, a yard of new white cloth, a cocoanut, five turmeric roots, five dry dates, five pieces of dry cocoa-kernel, five lemons, five sugarcanes, or in their absence five stalks of Indian millet, five dough-cakes, frankincense, camphor, and money. A few neighbouring Aradhis both men and women are called, a spot of ground is cowdunged, and a low wooden stool is set in the spot. Over the stool the white cloth is spread and the rice is heaped on the cloth. On the rice is set a water-pot or ghat filled with water, five betelnuts, ten betel leaves, and $1\frac{1}{2}d$. to 2s. (Re. 1/16 -1) in cash. The mouth is closed with a cocoanut. Then five sugarcanes or five millet stalks are tied together and made to stand over the stool. At each corner of the stool are placed betelnuts, lemons, dates, turmeric roots, dry cocoa-kernels, and one of each is laid in front of the water-pot. The presiding Aradhi is termed *guru* and worships the water-pot or ghat. A dough cake and a flower garland are dropped from the sugarcanes over the water pot; cooked rice and wheat bread and molasses are offered to the god; frankincense and camphor are burnt before it; and the teacher and other Aradhis four times repeat the word udava or Arise. The officiating Aradhi places a thick unlighted roll of oiled rags on the novice's head, throws a shell necklace over his shoulder so that it falls on his right side, marks his brow with ashes or angarika, and gives him two baskets to hold in his right hand. After the novice has made a low bow before the goddess and the Aradhis, he presents the *guru* with $7\frac{1}{2}d$. to 2s.6d.(Re.5/16-1 $\frac{1}{4}$), feasts the brotherhood, and is declared an Aradhi. The initiation costs the novice 2s. to £2 (Rs.1-20). When they beg the Aradhi women wear their ordinary dress. The men wear a waistcloth or trousers, and a long coat reaching to the ankles besmeared with oil. They tie their hair in a knot behind the head like women use false hair, and deck their heads with

flowers and ornaments, generally of brass. They wear nose and earrings of brass and false pearls, brass and shell bangles, and wristlets. They wear a garland of kavdi shells hanging like sacred thread from the left shoulder down the right side. The shells, which are known as Bhavani kavdva or Bhavani's cowries are vellow marked with patches of red. The necklace costs 4¼d, to 6d. (3-4 as.), and is composed of thirty-five to forty shells. Besides the necklace they wear shell ornaments round the head, neck, arms, and fingers. They carry two bamboo baskets worth about 3d. (2 as.). One of the baskets is small called Parashram with five shells stuck to it, the other is large and has no other name except basket or pardi. From one of their shell necklaces hangs a cloth bag stuck round with shells in which they carry ashes or angarika, which they rub on the brows of the charitable. On their head rests a thick rope of rags soaked in oil but not lighted. Dressed in this way they start begging at six in the morning and beg till noon. Their chief begging days are Tuesdays, Fridays, and Sundays. When they come near a house they call out Emai Tukai cha Jogva, that is Alms in the name of Emai and Tukai. Sometimes four or five go in a band with drams or samels, metal caps or tals, and the one-stringed fiddle or tuntune, and their baskets, and beg singing and dancing. When they go singly they do not get one pound of grain in a day; when they go in bands with music they get three or four pounds besides old clothes and coppers. Except that their shell necklace and bamboo baskets are laid near the head and burnt or buried with them when they die, their marriage, birth, and death ceremonies are the same as those of the caste to which they belong. The Aradhis have a council and their disputes are settled by their religions head or quru. They do not send their boys to school and are a falling people.

BHAMTAS.

Bha'mta's. See UCHLES.

BHARADIS.

Bhara'dis are returned as numbering 920 and as found in small numbers all over the district. They are said to be descended from a Kunbi who, after being long childless, vowed that if he was blessed with sons he would devote one of them to the gods. They are a class of wandering beggars who chant verses in honour of Ambabai or Saptashringi, playing on a hourglass-shaped drum called *damaru* or *daur*, and dancing with lighted torches in their hands. The names in common use among men and women are the same as among Kunbis. Their surnames are Chavan, Gaikvad, Jadhav, and Sinde; and their

family gods are Devi Ambabai of Tuljapur in the Nizam's country, Jotiba of Ratnagiri, and Khandoba of Jejuri in Poona. Their home tongue is a corrupt Maratha. They have two divisions God literally sweet that is pure Bharadis and Kadu literally sour that is bastard Bharadis. These classes neither eat together nor intermarry. They are dark and strong with regular features and live in one-storeyed houses with mud walls and thatched or flat roofs. Their house goods include low stools, blankets, guilts, and vessels of metal and earth. They have no servants but own bullocks and other beasts of burden, and dogs. They are poor cooks and great eaters, and their staple food is millet bread, pulse, and vegetables. Their special dishes include sweet wheat cakes or *polis* and fried rice cakes or *telchis* with *qulavani* or rice flour boiled in water mixed with cocoa-milk and molasses. They eat fish and flesh except beef and pork, and drink country wines. They are given to smoking tobacco and hemp-flower or ganja. They shave the head except the top-knot and the face except the moustache and whiskers. The women tie their hair in knots, but have no taste for false hair or flowers. Men's everyday dress includes a loincloth or waistcloth, a shouldercloth, a shirt, and a many-coloured headscarf folded in puckers about the head, with a pair of sandals or shoes. The women dress in a Maratha robe and bodice but do not draw the skirt back between the feet. Both men and women have a store of ornaments and clothes like those of Kunbis. While they perform men wear a long and loose coat falling to the heels and smeared with oil with a light scarf or shela, a string of cowries about their neck, and jingling bells about their feet. As a class they are clean, idle, and orderly. They are professional beggars, going about beating their drum. They perform the gondhal dance chanting songs in honour of Tulaja Bhavani, accompanied by the double drum or samel and the one-stringed fiddle or tuntune. They spend their mornings in begging and the rest of the day in idleness. The villagers pay them yearly allowances in grain for performing the *gondhal* dance in the local temples during the navaratra feast, Bhavani's nine nights which end in Dasara in September-October. The women mind the house and weave girdles or kachas. They live from hand to mouth. They worship all Brahmanic and local gods and have special reverence for their family gods whose images they keep in their houses. They keep all Hindu feasts and fasts and ask the village Joshi to officiate at their marriage and death ceremonies. They belong to the *nath* sect and make pilgrimages to Alandi, Jejuri, Mahur, Pandharpur, and Tuljapur. Their religious teacher is a Kanphatya Gosavi. They believe in witchcraft, soothsaying, and in the power of evil spirits. Early marriage, polygamy, and widowmarriage are allowed and practised; polyandry is unknown. Their customs are the same as Kunbi customs. Every child between five and

eight must go through the ceremony of wearing *mudras* that is brass or horn earrings; the lobe is cut with a knife, so that the drops of blood fall on the ground apparently to satisfy the evil spirits, and a ring or *mudra* is passed through the hole so made. They have a caste council and settle their disputes at caste meetings under the presidency of their headman or *patil*. They send their children to school, but have no taste for learning, and are a falling class.

BHATS.

Bha'ts, or Bards, are returned as numbering 120 and as found wandering all over the district. They belong to two divisions, Maratha and Gujarati Bhats, who eat together but do not intermarry. Maratha Bhats who form the bulk of the Bhat population are like Maratha Kunbis and do not differ from them in dwelling, food, or drink. They are good cooks and moderate eaters. Their staple food is millet bread, pulse, onions, and fish curry. They eat flesh and drink liquor and hemp-water or bhang. Both men and women dress like Maratha Kunbis and have a store of clothes for holiday wear. As a class they are clean, orderly, thrifty, and hospitable. They are hereditary beggars, but some work as masons, others as husbandmen, and many as field labourers or house servants. Bhats are usually asked to join Malis and Kunbis in their thirteenth day death feast. Their duty is to call out the names of those who make presents to the chief mourner. The women mind the house, gather the grain which the villagers give them, watch the fields, and fetch firewood. They are said to be badly off as the villagers are less free than they used to be in their gifts of grain. They rank with Maratha Kunbis and do not differ from them in religion or customs. They worship all Kunbi gods and keep the usual fasts and feasts. They believe in witchcraft and soothsaying. Early marriage polygamy and widow-marriage are allowed and practised, polyandry is unknown. They are bound together by a strong caste feeling, and settle social disputes at meetings of adult castemen. They send their children to school but do not take to new pursuits. They are a falling class.

BHUTES.

Bhutes, or Devotees of Goddesses, are returned as numbering twelve and as found only in Haveli. They are followers of the goddess Bhavani and go begging from door to door and village to village with a lighted torch in their hands, and playing metal cups or *tals*, the one-stringed fiddle or *tuntune*, and the drum or *samel*. They cover themselves with shells from head to foot, mark their brows with redpowder or *pinjar*,

and have a square breastplate or *tak* hung from their necks. While begging they dance, sing songs, and touch their bodies with the lighted torch or *pot*. In appearance, speech, dress, food, and customs they do not differ from Marathas. They have a caste council, do not send their boys to school, and are poor.

CHITRAKATHIS.

Chitraka'this, or Picture Showmen, are returned as numbering 148 and as found over the whole district except in Indapur, Purandhar, and Poona. They take their name from *chitra* a picture and *katha* a story, because they show pictures of heroes and gods and entertain their audience by telling them stories from the Purans. According to their own account they formerly lived at Singnapur in Sholapur and came to Poona during the time of Shahu Raja (1708-1749). They have no divisions. Their surnames are Jadhav, More, Povar, Salunkhe, Sinde, and Thombre, and families bearing the same surname eat together but do not intermarry. The names in common use among men are, Hanmanta, Mania, Santu, and Rethu, and among women Bhimabai, Jankibai, Rakhma, Sakhu, and Vithabai. Patel is added to men's names, and bai to women's names as Mania Patel and Ramii Patel, Sakhubai and Rakhmabai. They speak Marathi both at home and abroad. In appearance they do not differ from ordinary local Maratha Kunbis. The men shave the head except the top-knot and the face except the moustache and whiskers. They live in houses of the poorer class with walls of clay and thatched roofs. Their house goods include blankets, guilts, cradles, boxes, and metal and earthen vessels. They own cattle but have no servants. They are moderate eaters and are fond of hot dishes. Their staple food is millet or nachni bread, vegetables, and nachni porridge or ambil. They bathe before they take their morning meal, and do not leave the house if they eat without bathing. They use animal food when they can afford it, which is not often. They eat the flesh of sheep and goats, fish, and poultry, drink liquor, and smoke hemp or ganja and opium. The men wear a loincloth, a shouldercloth, a Maratha turban, and a pair of shoes. The women wear the hair in a knot behind the head and neither wear flowers nor false hair. They wear the full Maratha robe, passing the skirt back between the feet and a bodice with a back and short sleeves, Neither men nor women have any store of fine clothes for holiday wear. As a rule Chitrakathis are dirty, thrifty, and hospitable. Their chief calling is begging by showing pictures of gods and heroes and reciting stories and songs about them. They also show wooden dolls whom they make to dance and fight to represent the wars of the heroes and demons. These puppet shows have ceased to be popular,

and they now seldom do anything but show pictures by which they make 8s. to 10s. (Rs. 4-5) a month. A boy begins to act as showman at twelve and in two years has mastered his work. A Chitrakathi's stock generally includes forty pictures of Ram worth 10s. to 12s. (Rs. 5-6), thirty-five of Babhruvahan the son of Ariun one of the five Pandavs worth 8s. to 10s. (Rs. 4-5), thirty-five of Abhimanyu another son of Arjun worth 10s. to 12s. (Rs.5-6), forty of Sita and Ravan worth 10s. to 12s. (Rs.5-6), forty of Harishchandra king of Oudh, and forty of the Pandav brothers worth 10s. to 12s. (Rs. 5-6). They paint these pictures themselves and offer them for sale, and they have a caste rule that on pain of fine every house must hare a complete set of pictures. The women mind the house and never help the men to show pictures. They fetch firewood, beg, and cook. As they get paid in grain their monthly food expenses are small. A birth costs 2s. to 6s. (Rs.1-3), a hair-cutting 2s. to 6s. (Rs.1-3), a marriage 10s. to £2 (Rs.5-20), a girl's coming of age 1s, to 2s. (Re. $\frac{1}{2}$ -1), and a death 4s, to 6s. (Rs.2-3). They are a religious people. Their family deities are Bhavani of Tuljapur and Khandoba of Jejuri. They employ a Brahman of any class or sect to officiate at their marriages and deaths. They are nominally followers of Vishnu but their favourite deity is Bhavani. They make pilgrimages to Alandi, Jejuri, Pandharpur, and Tuljapur, and their fasts and feasts are the same as those of cultivating Marathas. After the birth of a child the mother is bathed, and the child's navel cord is cut and it is bathed. Sometimes the mother does this herself; in other cases a woman is called to help. Bedding is spread on the floor and the woman lies down with the child beside her. The child is given water mixed with raw sugar and the mother is fed on oil and rice. On the fifth day a grindstone is placed where the mother and child were bathed, and before it are laid flowers, redpowder, and turmeric. An earthen pot full of *nachni* gruel and millet is set on the stone and in front of the stone a wheat flour lamp is filled with oil and lighted. On the seventh day the house is cowdunged. Impurity in consequence of a birth lasts ten days. On the eleventh the house is again cleaned. On the twelfth some neighbouring women are called and the child is named. Packets of betel leaves and of whole boiled millet grains called ghugaris are served and the quests retire. After this the mother is free to move about the house as usual. On some day when a child, whether a boy or a girl, is about seven months old the hair-cutting or javal is performed. For the hair-cutting they have to go to Jejuri, Tuljapur, or some other place of pilgrimage, where a goat is killed, the child bows before the god, the victim is cooked, and the ceremony ends with a feast. They marry their girls between three and twenty and their boys between three and twenty-five or thirty. The offer of marriage comes from the boy's side. The father of the boy goes to the parents of the

girl and asks them to give their daughter in marriage to his son. If the girl's parents are willing the boy's father calls the castemen and asks their approval. If they raise no objection he goes to the priest who chooses a lucky time for the marriage and preparations are begun. Wedding porches or mandays are built in front of the bride's and bridegroom's houses, a lucky pillar or *muhurt-medh* is set up in each porch, but no altar or bahule is raised in the girl's porch. Next day the bridegroom is led on foot in procession to the bride's and made to stand in the wedding porch on a spot strewn with rice. The bride is brought and made to stand facing the bridegroom and a cloth or antarpat is held between them. The Brahman priest repeats marriage verses and at the end the couple are man and wife. Then the priest winds a thread of five strands round two pieces of turmeric and ties one piece to the wrist of the bride and the other to the wrist of the bridgeroom. The skirts of their clothes are knotted together and they go and bow before the house gods. The girl's mother loosens their garments, a feast is given, and the guests withdraw leaving the bridegroom who spends the night at the bride's. Next day a new robe is given to the bride, and the bride and bridegroom are carried to the boy's house each seated on a man's hip. On entering the boy's house they bow to his house gods and each takes off the other's turmeric bracelets. A feast is given, the marriage quardian or devak is thrown into the river, and the wedding observances are at an end. When a girl comes of age she is considered unclean and is kept by herself for four days. On the seventh she is given a new robe and a bodice and at any time after goes to live with her husband. After death the body is washed in hot water and dressed in a loincloth, sandal paste and turmeric powder are rubbed on the brow, and if he is a man his turban is put on. He is seated on a blanket with some cooked rice tied to one of its corners. The chief mourner starts carrying an earthen pot with cooked rice in it; the bearers lift the body in a blanket and follow. Before they reach the burial ground the body is rested on the ground and the bearers charge hands. At the burying ground the chief mourner turns over a little earth and the bearers dig a grave and lay the body in it. Earth is thrown in and on the top the chief mourner strews the boiled rice which he brought in the earthen jar. All bathe in the river, go to the house of the dead, and return home. On the third day three cakes are baked and the chief mourner lays one at the place where the body was rested, and of the other two one is laid at the head and the other at the foot of the grave. They do not have their moustaches shaved and they do not offer balls of rice to the dead. On the thirteenth a caste feast is held, when goats are sometimes killed and others give pulse bread and rice. Their only memorial ceremony in honour of the dead is during the mahal or All Saints' fortnight in the

latter half of *Bhadrapad* or September. They have no headman, but settle social disputes at meetings of castemen. Persons convicted of breaches of caste rules are made to give food to five boys or men. As a class the Chitrakathis are badly off and are growing poorer.

GONDHLIS.

Gondhlis, or Performers of the *gondhal* dance, are returned as numbering 683 and as found in Haveli, Bhimthadi, Maval, Junnar, Indapur, Khed, Sirur, Purandhur, and Poona City. They say the founders of their caste were the sage Jamdagni and his spouse Renuka, and that they came into the district two or three hundred years ago from Mahur and Tuljapur in the Nizam's country. They are divided into Brahman-gondhlis, Kumbhar-gondhlis, Kadamrai-gondhlis, Renurai-gondhlis, and Akarmasi-gondhlis, who neither eat together nor intermarry. The following particulars apply to Kumbhar-gondhlis. Their surnames are Badge, Dhembe, Gangavan, Garud, Jugle, Jadhav, Panchangi, Thite, Vaid, and Varade. Families bearing the same surname cannot intermarry. The names in common use among men are Appa, Bapu, Bhaquji, Haibatrao, and Khandu; and among women Anandi, Jago, Kondai, Rhai, Rama, and Saku. They look like Marathas and speak Marathi. In house, food, drink, and dress they resemble Marathas. They are beggars begging from door to door for grain, clothes, and money, singing, dancing, and playing on a drum called sambal, the stringed fiddle or tuntune, and metal cups or tals. They also perform the *gondhal* dance and entertain people with their songs. The gondhal dance is performed among Brahmans in honour of the goddess Bhavani on the occasion of a thread ceremony, of a marriage, and of the seventh month of a woman's first pregnancy. Among Marathas and other castes such as Shimpis and Sonars the *gondhal* dance is performed only at marriages either before or after the ceremony. The dance always takes place at night. During the day a feast is given, the dancers, who generally perform in companies of three to five, being the chief guests. At night the dancers come back bringing their musical instruments, a torch or *divti*, and the dress of the chief dancer. On a wooden stool in the largest room of the house they spread a bodiceoloth or *cholkhan*, and on it lay thirty-six pinches of rice, and sprinkle the rice with turmeric and redpowder. In the middle of these pinches of rice a water-pot or tambya is set and filled with milk and water, and lines of sandal are drawn over the pot. In the mouth of the jar betel leaves are laid and the whole is closed with a cocoanut. Over the cocoanut a flower garland hangs from a triangle formed of three sugarcanes. On the stool in front of the pot are laid betelnuts, plantains, dates, and lemons. With the help of the chief

Gondhli the head of the family worships the water-pot as the goddess Tuljabhavani, offering it flowers and rice, waving before it a lighted butter lamp, and burning camphor and frankincense. Five male members of the family light five torches and go five times round the goddess shouting the words Ai Bhavani Jagadamba, Mother Bhavani, Mother of the World. The head dancer, dressed in a long white oily coat reaching to his ankles, and wearing cowry-shell necklaces and jingling bell anklets, takes his stand in front of the goddess. A second of the troop stands to the right of the headman holding a lighted torch and three others stand behind him playing on a drum, a fiddle, and cymbals. On either side of the Gondhli troop sit the house-people, men on one side women on the other. The head dancer touches the lighted torch with sandal paste, bows low before it, and calls, Khandoba of Jejuri come to the *gondhal*; Tukai, Yamai, mother Bhavani come to the gondhal. [The Marathi runs: Jejurichya Khandoba gondhala ye; Tukai, Yamai Ai Bhavani gondhla ye. He begins singing and dancing going forwards and backwards, the musicians play their drum, fiddle, and cymbals, and the torch-bearer serves as a butt for the dancer's jokes. The chief after dancing at a slow pace without turning round and with little movement of the feet, repeats a story from the Ramayan and explains its meaning. The performance lasts from a few minutes to several hours; it sometimes is kept up with frantic enthusiasm till daybreak. Occasionally one of the guests becomes possessed and a spirit in him says why he has entered his body. At the end of the dance a lighted lamp is waved round the goddess and the dancers retire with a present of 2s. 6d. (Rs. 1¼). On a lucky day when a Gondhli boy is about ten year's old the men of the caste come and fasten a cowry garland round his neck. The guests after witnessing the ceremony retire each with a handful of sugar and a betel packet. Gondhlis get all their food and clothes by begging. Their house goods are worth 4s, to £2 (Rs. 2-20). A boy's marriage costs about £5 (Rs. 50), a girl's about £2 (Rs. 20), and a death about 14s. (Rs. 7). They reverence the usual Hindu gods and goddesses, but their chief object of worship is the goddess Renuka of Mahurgad in the Nizam's country. Their priests are ordinary Deshasth Brahmans. On Tuesdays and Fridays they eat only once, and keep the regular Hindu fasts and feasts. The nine nights or Navaratra which end in Dasara Day in October is their biggest festival. Because their family goddess sleeps on a cot at Mahurgad, they do not allow their women in child-bed to lie on a cot but on the ground. They marry their boys before they are twenty-four, and their girls before they are sixteen. Their badge or devak is the leaves of five trees, the mango, savandad, palas, umbar, and rui, which they tie up during a marriage. They also tie in the marriage hall a drum or sambal, a chavak or one-stringed fiddle, a

garland of cowry shells, and their begging bag. Their marriage ceremonies last three days. On the first day they feast the caste in honour of the family gods, and on the second the marriage ceremony is performed, the boy and girl being made to stand face to face on leaf plates or *patravlis*. A feast on the third day ends the ceremony. They either bury or burn their dead, and mourn ten days. They have a caste council. They do not send their boys to school and are a steady class.

GOSAVIS.

Gosa'vis, properly *Gosvamis* or Passion Lords, are returned as numbering 3709 and as found over the whole district. Though many live by begging and are poor, some are well-to-do, and a few are rich living as moneylenders, as dealers in pearls, cloth, shawls, and musk, as writers, and as husbandmen. Many Gosavis enlisted in the Peshwa's army and Gosavis formed a portion of most hill fort garrisons. Details are given in the Poona City account.

HOLARS.

Holars, apparently the Kanarese Holeyars or men of the soil, are returned as numbering 502 and as found in Poona City only. They say they came into the district about the time of Balaji Vishvanath Peshwa (1714-1720), and their name seems to point to a Karnatak origin. They have no divisions and their surnames are Edve, Govare, Povar, and Sonvane; persons bearing the same surname cannot intermarry. They look and speak like Mhars. They live in houses with mud walls and tiled roofs. Their house goods include earthen cooking pots, wooden plates, and a couple of brass dishes and drinking pots, blankets and guilts, together worth about £1 (Rs. 10). Their staple food is millet, Indian millet, pulse, and vegetables, and occasionally rice, fish, flesh, and liquor. They smoke both tobacco and hempflowers. They dress like Mhars and are an orderly people. They are musicians and songsters, and play upon a bamboo pipe or alguj, a sanai of wood with brass top and bottom, a sur or long wooden pipe, and a drum or daf. A band of these musicians includes a drummer and three pipers of whom two play the brass pipe or sanai and the third the wooden pipe or sur. They play at Maratha marriages and are paid 4s. to £1 (Rs. 2-10) for a marriage. Their busy season is from Kartik or November to Chaitra that is March or Jyeshth that is May. During the rest of the year they go about playing on their pipes, singing, and begging. Their songs are much patronized by people who are fond of amusement, and their playing on the alguj or bamboo pipe is very popular. Their women do not help them in their begging and playing,

but boys above twelve go with them playing the wooden or sur pipe, which is easier to play than either the drum or the brass pipe. They worship the usual Hindu gods and have house images of Khandoba, Bahiroba, and Janai. Their fasts and feasts are the same as those of Mhars, and their priests are ordinary Deshasth Brahmans. They go on pilgrimage to Pandharpur, Tuljapur, and Alandi. When a child is born its navel cord is cut by an elderly woman of the house, and it is fed for three days on molasses mixed with water called *gulavani*. After the third day the mother nurses it and to increase her milk she is given a mixture of *limb* juice and *karle* oil. On the fifth day two figures are traced in charcoal on the door of the lying-in room and an elderly woman worships them as the goddess Satvai. The figures of the goddess are offered wheat bread and rice, and the mother brings her child and bows before them and the ceremony is over. On the twelfth day, the mother worships five pebbles out of doors, and offers them bread and rice. A child is named when it is a month old, the name being given by a Brahman priest. Their children's hair is clipped any day between four months and a year after birth. Five pebbles are worshipped at some distance from the house or in the bush, a goat is offered, and they return and feast. They marry their girls between seven and sixteen, and their boys between ten and twenty-five. Their marriage ceremonies are the same as those of Mhars. When the ceremony is being performed the bride and bridegrom stand on bamboo baskets. Their coming of age ceremony is the same as that of the Mhars. They bury their dead, and mourn thirteen days. They have a caste council, and settle social disputes at caste meetings. They do not send their boys to school, and are not a steady people.

JANGAMS.

Jangams, or Moveable that is Incarnate Lings, the priests of the Lingayats, are returned as numbering 917 and as found over the whole district. They are said to have come from the Kanarese districts in search of work about a hundred and fifty years ago. The names in ordinary use among men are China, Ramchandra, and Vitthal; and among women, Gaya, Jankibai, Kashibai, and Umabai. Their surnames are Brahmani, Patavekar, and Shivurkar, and their family gods Ekorama Pandita, Marul, Revajsiddha, and Siddha Pinditaratya. They are divided into priests and laymen, who eat together and sometimes intermarry. Their family stocks are Bhringi, Nandi, Matsarup, Virabhadra, and Vrishabh. Persons bearing the same surnames cannot intermarry. Their home tongue is a corrupt Marathi. As a class they are dark, strong, and muscular. The laymen shave the head except the top-knot and the face except the moustache and whiskers. The priests

let the beard grow and wear no top-knot. They live in two-storeyed houses of the better class with brick walls and tiled roofs and their house goods include boxes, carpets, and metal vessels. They own cattle but keep no servants. They are moderate eaters and good cooks, and are fond of hot dishes. Their staple food is rice, pulsesauce, and bread. They regularly bathe before they take their morning meals and worship Shiv's emblem the ling with flowers and some of the food they are going to eat. They do not use animal food or liquor but they have no objection to smoke hemp-flower or ganja. The women tie their hair in a knot at the back of the head, but do not wear false hair. Both men and women wear clean and neat clothes and are fond of gay colours. The men dress in a waistcloth, a shouldercloth, a coat, and a Deccan Brahman turban, with a pair of shoes or sandals. The women dress in a long Maratha robe and a full-backed bodice with short sleeves. Both men and women have a store of clothes for special ceremonies, and of ornaments made in Deccan fashion. As a class Jangams are clean, orderly, lazy, thrifty, and honest, but not hospitable. Their principal and hereditary calling is begging alms from lay Lingayats. They belong to the Shaiv sect. Their chief holidays are Shimga in March, Akshatritiya in May, and Dipvali in October. They keep Mondays and ekadashis or lunar elevenths, and all fast on Mahashivratra or Shiv's Great Night in February. They have their own religious teacher who lives in the Karnatak and occasionally visits villages where Jangams are settled. They say they do not believe in witchcraft or in the power of evil spirits. Early marriage and polygamy are allowed; polyandry is unknown. As soon as a child is born word is sent to the priest, who rubs the mother's brow with cowdung ashes and invests the child with the *ling* either at once or on the fifth or thirteenth day. In investing a child the priest touches its neck with the ling and gives the ling to the mother. The mother's impurity lasts five days. At the end of the fifth day, as among Brahmanical Hindus, an embossed image of Satvai is worshipped. The child is named on the twelfth. The diksha or initiation ceremony of the child, whether male or female, is performed between twelve and fifteen. The teacher is asked and seated on a low stool, his hands and feet are washed, and part of the water is sipped by the novice. Sweetmeats and bel leaves are offered to the teacher who whispers a verse or mantra in the novice's ear and is treated to a sumptuous dinner with the friends and relations of the houseowner. Boys are married between eight and thirty and girls between five and twelve. The marriage and other rites performed by the Poona Jangams are partly Brahmanical and partly Lingayat. They do not differ much from those in use among Belgaum Jangams. Their religious peculiarities seem to tone down in districts where the bulk of the people are attached to Brahmanism. Among Bijapur

Jangams, women in their monthly sickness are not considered impure; in Poona they sit apart for three days. All Soul's fortnight in *Bhadrapad* or September is not observed in Bijapur; it is observed in Poona. They have a caste council and settle social disputes at meetings of adult castemen. They send their children to school, take to new pursuits, and show a tendency to rise in wealth and position.

JOGTINS.

Jogtins are recruited from all classes and castes of Hindus. If a man is childless or has a child sick of some serious disease he vows that if Yelamma him gives a child or cures the child he will dedicate it to her. Boys who have been dedicated to Yelamma in this way are called Jogtis. When they come of age they are allowed to marry girls of their own caste. But dedicated girls, who are called Jogtins, are not allowed to marry. They look like Marathas, mark their brows with redpowder, speak-Marathi, and live eat and dress like Marathas. They are beggars, begging in the name of the goddess Yellamma whose shrine is at Saundatti near Dharwar. They worship the usual Brahmanic gods and goddesses and have house images of Yelamma and Parashuram. Their chief holiday is *Dasara* in October and the nine previous nights. The teacher or *quru* of the class who may be either a man or a woman settles social disputes and fines offenders 2d. to 2s. (Re.1/12 -1). From every 1¼ anna of the fine the teacher keeps $\frac{3}{4}d$. (½ a.) to himself and spends the rest in sweetmeats or betel which are served to the members of the class. They are a steady people.

JOHARIS.

Joha'ris, or Jewellers, are returned as numbering 120 and as found in large towns. They are said to have come from Marwar about seventy years ago for purposes of trade. They are like Upper India Pardeshis and do not differ from them in dwelling, food, drink, or dress. They are strict vegetarians and take no liquor, though some eat opium and drink hemp-water or *bhang*. The men have taken to the Maratha dress but the women keep to the full northern petticoat and open-backed bodice. As a class they are clean, hardworking, and thrifty. They are hereditary beggars who deal in old lace and ribands, and profess a knowledge of physic. They live from hand to mouth. The women mind the house and offer metal pots in exchange for old clothes or lace, hawking them from door to door. They are religious, worshipping family gods and Krishna, Maruti, Ramchandra, and *tulas* or the sweet basil plant, and keeping the usual Brahmanic fasts and feasts. They have a great reverence for Ram the seventh incarnation of Vishnu and

the hero of the Ramayan. Their great holidays are Ram-navami in April, Gokul-ashtami in August, and Navaratra in September. They make pilgrimages to Oudh, Gokarn, and Gokul-Vrindavan. They profess not to believe in witchcraft or in evil spirits. Early marriage and polygamy are allowed, widow marriage is forbidden, and polyandry is unknown. On the third and fifth days after the birth of a child the goddess Satvai is worshipped, and the child is named on the twelfth day. The mother's impurity lasts twelve days. Boys are girt with the sacred thread between five and eight and married between eight and thirty; girls are married between five and twelve. A Pardeshi Brahman priest officiates at the marriage and performs the same rites as among Pardeshi Brahmans. They burn their dead and mourn ten days. The crows are fed on the enth and on the eleventh the kinsmen of the dead purify themselves by sipping the five cow-gifts. On the twelfth the caste-people are asked to dine in the name of the dead and a rice ball is offered to the dead. Their mind-rites are the same as those in use among Pardeshi Brahmans. They mark the death-day by a mindrite or shraddh. They are bound together by a strong caste feeling and settle social disputes at meetings of adult castemen. They send their children to school and take to new pursuits. They are said to be still burdened by debts incurred during the 1876-77 famine.

KANPHATES.

Ka'npha'tes, or Slit Ear Gosavis, are returned as numbering 123 and as found in Haveli, Bhimthadi, and Poona. They have no subdivisions. Their surnames are Chavhan, Rathod, Ghatge, Mule, Salunke, Shinde, and Shitale. The names in common use among men are Sambhu, Kashinath, Bhivnath, Rama, and Vithal; and among, women Bhima, Ganga, Nira, and Sita. They are a tall dark strong and robust people. The men wear the moustache, whiskers, and beard. They speak both Hindustani and Marathi. They live in huts of matting set on bamboo sticks. Except the dining plate and water-pot their vessels are of earth. They are a wandering class and move from village to village carrying their huts and goods on ponies and buffaloes. They always keep dogs. They eat fish and the flesh of sheep, goats, hare, deer, the wild hog, fowls, and partridges, and drink liquor. They are given to smoking hemp or ganja and eating opium. The men dress in an ochre-coloured Maratha turban, a loin or waistcloth, a shouldercloth, and sometimes a coarse waistcloth. They wear large thick ivory, clay, bone, or fish-scale earrings in the lobes of their ears and a necklace of rudraksha beads. The women wear a petticoat and bodice and braid their hair leaving it hanging down the back in plaits. They wear glass and gueensmetal bangles and toe-rings, and a marriage-string or *mangalsutra* of black

glass beads. They are beggars and earn their living by singing and playing on the guitar, Raja Gopichand being generally the hero of their songs. They are religious and their chief gods are Gorakhnath and Machhandranath. They keep the usual Brahmanic fasts and feasts and their priests are Deshasth Brahmans to whom they show great respect. They believe in sorcery and witchcraft and travel from place to place visiting all the chief places of pilgrimage. On the fifth day after a birth they feast five married women and ask a Brahman to give them a name for the child. They marry their girls after they come of age, and their boys when they are above twenty-five. The boy and girl are seated face to face on a guilt and the priest repeats marriage verses or mangalasthaks, and when the verses are finished throws grains of rice over their heads and ties together the hems of their garments. This knot is called Brahmagath or Brahma's knot; after it is tied nothing can separate them. They do not hold the cloth or antarpat between the boy and girl at the time of marrying them. Their widows marry and they allow polygamy, but not polyandry. They bury their dead and mourn twelve days. They are bound together as a body, have a headman or patil, do not send their boys to school, and are poor.

KOLHATIS.

Kolha'tis, or Tumblers, are returned as numbering 395 and as found all over the district except in Khed. They are divided into Dukar or Potre Kolhatis and Pal or Kam Kolhatis who do not eat together or intermarry. The surnames of the Pal Kolhatis are Anudhare, Jadhav, Kachare, Musale, Povar, and Shinde; families bearing the same surname can not intermarry. The names in common use among men are Dada, Khandu, Lakshu, Malu, Nhanu, Vitu, and Vaghu; and among women Bhima, Dhanabai, Gulabo, and Rangu. They are a goodlooking class, particularly the women. They speak a mixture of Kanarese, Marathi, Gujarati, and Hindustani. For Come here they say Yame ava ; for Where have you been, Kame gaya thiya; for Bread Roti; for Marriage Bihav; and for Sleep Nind. They live in huts of mat or grass or in houses with mud walls and grass roofs. They are a wandering tribe and carry their huts on their heads or on donkey-back. Their goods include a few earthen pots and pans, some blankets, and a cot. They keep donkeys, sheep, and fowls, and their staple food is Indian millet, millet, split pulse, and sometimes rice, fish, and flesh. In addition to this, the Dukar Kolhatis eat beef and pork. They drink liquor, and smoke tobacco and hemp-flowers. A family of five spends £1 to £1 10s. (Rs. 10-15) a month on food. The men wear a pair of short breeches or chadis, a waistcloth and shouldercloth, and a waistcoat, and roll a scarf or a Maratha turban round their heads. They wear the topknot, moustache, and whiskers. The women tie their hair in a knot at the back of the head, and those who are prostitutes wear false hair and decorate their heads with flowers. All wear a tight-fitting bodice with sleeves and back, and the full Maratha robe with the skirt passed back between the feet and fastened into the waistband behind. Those who act as prostitutes have a store of rich clothes worth £5 to £15 (Rs. 100-150) and a number of gold silver and pearl ornaments worth £5 to £15 (Rs.50-150). Their head ornaments are the rakhdi, kevda, and ketak; their nose ornament is the nath; their earrings are the antya, bali, dorle, and vajratik; their bracelets are gots and bangles; their anklets are todes; and their toe-rings are jodvis.] Women who are not prostitutes wear bracelets or gots worth about 3d. (2 as.) and gueensmetal toe-rings or *jodvis* worth about 4½d. (3 as.). They are dirty and lazy and maintain themselves by showing feats of strength and by rope-dancing and begging. As prostitutes they earn 6d. to 1s. (4-8 as.) a day. They are taught to jump and tumble from the age of eight, and at sixteen are good gymnasts. A family of five spends 16s. to £1 (Rs. 8-10) a month on food, and 10s. to £1 (Rs. 5-10) a year on clothes. A birth costs about 4s. (Rs. 2), a marriage 10s. to £2 10s. (Rs. 5-25), a girl's coming of age 4s. (Rs. 2), a girl's starting in life as a prostitute about £1 (Rs. 10), and a death 10s, to £1 10s. (Rs. 5-15). They are Hindus and their chief god is Khandoba of Pali in Satara. They pay great respect to Mariai the Cholera Goddess, Jotiba, and Bahiroba. They fast on *Shivratra* in February, on *Ashadhi* ekadashis in July, on Gokul-ashtami in August, and on Kartiki ekadashis in November. Their holidays are Sankrant in January, Shimga in March, Gudipadva in April, Nagpanchmi in August, Dasara in October, and *Divali* in November. Their priests are Deshasth Brahmans whom they call to their weddings. They respect Musalman saints or Pirs, and have great faith in soothsaying, sorcery, and the evil eye. A woman is held to be impure for five days after childbirth. On the fifth day they worship seven pebbles in honour of the goddess Satvai outside the house and lay before them wet gram and wheat-cakes or mutkes. They name their children about five weeks after birth, the name being given by a Brahman. Kolhatis marry their boys before they are twenty-five and their girls before they come of age. The boy's father goes with five men and two or three women to the girl's and presents her with a packet of sugar. The guests are taken by the boy's father to a liquor-shop and treated to liquor. The marriage ceremony lasts five days. On the first day, which is generally a Sunday, they have the devak or marriage-quardian ceremony, when, both at the boy's and the girl's, a metal water-pot is placed in a gueensmetal plate and filled with water. Five betelnuts and turmeric powder are dropped into it and the mouth of the pot is closed with a cocoanut.

Frankincense is burnt before the pot, the cocoanut is broken to pieces, and all present eat it. During the whole time these rites are going on one of the party plays a drum or dhol. On the second day they rub the boy with turmeric at his house and send the rest to the girl. Nothing is done on the third or fourth day except feasting. On the fifth the boy goes to the girl's and they are seated on cots near each other. The skirts of the boy's and girl's cloths are tied together by men of the caste and this is the whole marriage ceremony. After they are married the caste-men advise the boy to take care of his wife. The ceremony ends next day with a feast. When a girl comes of age she is seated by herself for five days. On the morning of the sixth she is bathed and her lap is filled with five dry dates, five turmeric roots, five pieces of cocoa-kernel, and five wheat cakes or *mutkis*. If a girl chooses to become a prostitute her choice is respected. She puts herself under the protection of some one not of the caste, who keeps her for a time paying 10s, to £10 (Rs. 5 - 100). Kolhatis do not rank among the impure castes. They are touched by Brahmans and other high-caste Hindus and by Parsis and Musalmans. They do not receive visits from Mhars or other low-caste Hindus, the children of a Kolhati prostitute, whether they are boys or girls, though they are not outcastes, cannot marry with legitimate Kolhati children. The Kolhatis bury the dead. The body is carried on a cot or baj by four men. Near the burial ground they lower the cot, the bearers change places, and set a stone where the cot was laid and carry the body to the burial ground and bury it. After burying it they return to their houses. On the third day they go to the burial ground, raise a mound on the spot where the body was buried, and going to the spot where they left the stone, cook a dish of rice oil and molasses, offer a little to the crows, themselves eat a little, and return home. The chief mourner is impure for three days, and at the end of a month feasts the caste. They have a caste council. They do not send their boys to school, and are a poor people.

MANBHAVS.

Ma'nbha'vs, probably meaning men of learning, are returned as numbering 222 and as found over the whole district except in Maval and Poona. They speak Marathi, and are wandering beggars. Both men and women shave their heads and live together in religious houses or *maths.* They are vegetarians and wear black clothes. They are a sect of Krishna-worshippers and hate Brahmans and their gods. They bury their dead and do not bathe in case it should cause loss of insect life. Their religious head is a wandering *guru* whom they call Mahant. He is succeeded by his chief disciple who always stays with him.

MURLIS.

Murlis. See VAGHERS

PANGULS.

Pa'nguls are returned as numbering eighty-eight and as found over the whole district. They are said to be the descendants of a lame man or pangala whose parents devoted him to the service of the god Shankar because the god blessed them with children after the usual time for child-bearing had passed. The names in common use among men and women are the same as Maratha Kunbi names. Their surnames are Bachakire, Badhake, Dhumale, Hingmire, Jadhav, Sinde, Jate, and Vaghamode. Persons bearing the same surnames do not intermarry. Their family gods are Bhavani of Tuljapur, Janai of Paithan, and Khandoba of Pali and Jejuri in Poona, Mahadev of Sijanapur, and Satvai of Manakeshvar. Their illegitimate children eat with them but do not marry with them. In look, dwelling, food, and drink they do not differ from local Maratha Kunbis. As a class they are dirty, orderly, hardworking, thrifty, and hospitable. They are a class of wandering beggars, but they also deal in wood and poultry. They repeat the names of their family gods and move begging from door to door from six to ten in the morning, and return home at noon. The women mind the house and work as labourers or house servants; children above six beg in the street. As a class they are very poor. They spend more than they can afford and are encumbered with debt. They rank below Maratha Kunbis and above the impure classes. They are religious, worshipping family and local gods, and keeping all fasts and feasts. They are Shaivs by sect and their priest is a Deshasth Brahman who is called to their marriages. They visit all Hindu sacred places in the Deccan, and believe in soothsaying and witchcraft. Early marriage, widow-marriage, and polygamy are allowed and practised; polyandry is unknown. On the fifth day after the birth of a child the goddess Satvai is worshipped and the women of the house sit up all night. The mother's impurity lasts ten days and she is purified on the eleventh day by taking the five cow-gifts; the child's hair is clipped before it is a year old, when Satvai is again worshipped and a goat is slain in her honour. Boys are married between twelve and twenty-five and girls between three and twelve. The boy pays the price of the girl and the sanction of the castepeople is given before the agreement is final. Their marriage and death rites are the same as those of Maratha Kunbis. They burn the dead and mourn ten days. The death day is marked by a mind-rite or shraddh and the dead are again remembered on the day in the Mahalaya Paksh or All Souls' Fortnight in Bhadrapad

or September which corresponds to the day of death. They are bound together by a strong caste feeling and settle social disputes at meetings of castemen. They send their children to school and show a tendency to improve.

SARVADE JOSHIS.

Sarvade Joshis are returned as numbering 1623 and as found over the whole district. They cannot tell why they are called Sarvades, or when and why they came into the district. They believe they came about a hundred years ago. Their surnames are Bhosle, Chavan, More, Sinde, and Salunke; persons bearing the same surname cannot intermarry. They look like Marathas; the men are tall, thin, and dark, and wear moustaches and whiskers and occasionally the beard. Their home speech is Marathi. They are wandering beggars and live either in or outside of villages in thatched huts. Their household goods are two or three earthen vessels, a brass dining plate, and a couple of drinking pots. They eat anything that is given them in alms and have no objection to fish and the flesh of goats, sheep, hare, and deer; they seldom drink liquor. The men dress like Marathas, except that their begging coats are rather long. They generally wear a white Maratha turban, waistcloth, and shouldercloth, and Brahman shoes or sandals. When begging they carry a small drum called *hudki* slung on their back, and an old almanac in their pocket which they do not know how to read. Their women dress like Maratha women and both men and women have no clothes in store and no ornaments. They are a poor, patient, sober, thrifty, and orderly class of beggars, and tell fortunes with great solemnity. They do not admit that they beg. In the Satya Yug they told the gods their fortunes, and what they now get is in reward for this and is not given in charity. They are astrologers and fortune-tellers and travel with their families. They start in the beginning of November and return before May. Before starting on their begging tours they make a low bow their drum or hudki, the breadwinner. Their women and children accompany them on their tours but do not go with them when they beg. They are Shaivs in religion and have house-images of Janai, Jokhai, Elama, and Khandoba. Their priests are Deshasth Brahmans to whom they show great respect, and their fasts and feasts are the same as those of Maratha Kunbis. When a child is born a man or woman of the house cuts its navel cord and burys it in the lying-in room along with a copper coin. The coin is afterwards dug out and spent in buying oil to rub on the child's head. On the seventh day a grindstone is laid on the spot where the navel cord is buried, and Indian millet and a betelnut and two leaves are offered to it. The mother and child bow before the stone and retire.

Their women do not consider themselves unclean after childbirth. Both boys and girls are named on the twelfth day. When the child is a couple of months old whether it is a boy or a girl they clip its hair with their own hands, but perform no other ceremony. They marry their children whether boys or girls at any age. A marriage costs £1 to £2 (Rs. 10-20) of which 1s. or 1s. 3d. (8-10 as.) go to the priest who marries them. Marriage dinners do not include more than ten or twenty guests and do not cost more than 4s. (Rs. 2). Their women are not kept by themselves when they come of age, and the occasion is not marked by any ceremonies. A month later they are kept by themselves and if married go to live with their husbands. They bury their dead and allow the dying to breathe their last on their beds. The chief mourner does not shave his moustache but on the third day near relations go to the burying ground and lay some pinches of earth on the spot where the dead was buried and return home. They mourn seven days and end the mourning with a feast to the four corpsebearers. On the deceased's death-day a dinner is given to a few near relations and crows, and the Brahman priest is presented with uncooked food or shidha. They have a caste-council and settle social disputes at meetings of the castemen. They do not send their boys to school but teach them their craft from the age of eight. They are daily growing poorer as people are not so liberal as they used to be in giving them alms. They seldom get old clothes or money, and grain is given them by pinches instead of by handfuls. Their prophesies are not believed, and they are driven from the door.

SAHADEV JOSHIS.

Sahadev Joshis or **Hussaini Bra'hmans**, are found in Poona. They say they are descended from Sahadev, the grandson of Kalidas the great poet. Kalidas is said to have had by a Maratha husbandman's daughter a son named Devidas who married one Bhadli by whom he had a son named Sahadev, the father of the Sahadev Joshis. The Sahadevs cannot tell when, whence, or why they came into the district. They believe they were formerly settled at Aurangabad and came to Poona about a hundred years ago. Their surnames are Botludas, Bhagade, Gachkeshvar, Nayakil, and Renukadas. They are dark, weak, and middle-sized; the men wear the top-knot, moustache, and whiskers, but not the beard. They live in houses of the poorer class, and have metal and earthen vessels, blankets, carpets, and bedding, but neither servants nor domestic animals. Their staple food is millet, rice, pulse, vegetables, curds, and whey, and they are fond of sour dishes. They eat the flesh of goats and sheep and drink liquor once a year in October on Dasara Day after offering it to the goddess

Bhavani. They dress like Deccan Brahmans in a waistcloth, coat, shouldercloth, and Brahman turban and shoes. Their women wear the short-sleeved and backed bodice and the full Maratha robe, the skirt of which they pass back between the feet and tuck into the waist behind. They tie their hair in a ball at the back of the head and do not deck it with flowers. They are quiet orderly and hospitable, and make their living as beggars and astrologers. A boy's marriage costs £7 to £10 (Rs: 70-100), a girl's marriage £3 to £5 (Rs. 30-50), and a death £1 (Rs. 10). They worship the usual Brahmanic and local gods and goddesses. Their family goddesses are the Mothers of Saptashringi and Tuljapur whom they visit when they can afford it. They keep the regular Brahmanic fasts and feasts. Their priests are Deshasth Brahmans who officiate at their houses. They believe in sorcery, witchcraft, soothsaying, omens, and lucky and unlucky days, and consult oracles. On the fifth day after the birth of a child they put a silver mask of the goddess Satvai in a cocoa-kernel, place it on a stone slab in the mother's room, and worship it with red and scented powder, flowers, and pulse cakes. They hold the mother impure for ten days and name the child if a boy on the twelfth and if a girl on the thirteenth. They clip a boy's hair when he is between seven and twelve months old. The hair is laid before the house-gods and then either tied to a tree or thrown into a river or pond. The barber is given about 3d. (2 as.) and cooked food, and five married women are feasted, the chief dish being pulse cakes. They marry their girls before they are sixteen and their boys before they are twenty-five. The boy's father has to seek a wife for his son. When he has found a suitable match he goes to the girl's house with a few near relations, worships a betelnut along with the girl's father, and presents the girl with a new robe and bodice and sticks a rupee on her brow. The village astrologer writes two notes naming the lucky days and hours for rubbing the children with turmeric and marrying them, and each of the fathers keeps a copy of the note. Packets of betelnut and leaves are handed and the quests retire. Their quardian or devak is the leaves of five trees or panchpallav which they tie to a post of the marriage hall in a piece of yellow cloth. On the marriage day the boy goes on horseback, with relations and music, to the girl's, and a married woman of the girl's family goes with a water jar and pours the water in front of the horse. The girl's relations present her with a bodice. Cooked rice and curds are waved round the boy's head and thrown on one side, and the boy dismounts and walks into the marriage porch. In the house he is seated on a carpet, a second thread is put round his neck, and the girl is brought in. When the girl comes she and the boy either stand or sit on low wooden stools face to face with a cloth held between them. The priest repeats marriage verses, and at the end of the verses throws

grains of rice over the boy and girl and seats them near each other on the altar. The sacrificial fire is lighted and they are married. The hems of their garments are knotted together and they bow before the house gods. They are again seated on an altar and either the girl's maternal uncle or her father washes their feet and presents the boy with five metal vessels including a lamp, a water-pot, a cup, and a plate. Money is given to Brahmans and other beggars, and, after a feast and betel, the guests leave. Next day the boy goes with the bride in procession to his house and the marriage festivities end with a feast. They allow widow-marriage and polygamy, but not polyandry. A day or two before a man's death his moustache and top-knot are shaved and he is made an ascetic or sanyasi. When he dies he is laid on a bamboo bier and carried by four men on their shoulders, and buried sitting. The chief mourner pours water over his mouth, walks five times round the grave with an earthen jar on his shoulders, and dashing the jar on the ground beats his mouth with the back of his right hand and calls aloud. The grave is filled and after a bath the mourners return to their homes. On the third day they sprinkle the grave with cow's urine and dung and lay on it three wheat cakes and three earthen jars filled with cold water. On the tenth day they throw eleven rice balls in the river in honour of the dead and the mourning is over. Either on the twelfth or thirteenth day they feast the caste. They have a caste council and send their boys to school. They are a poor people.

TIRMALIS.

Tirma'lis, also called Ka'shi Ka'padis, are returned as numbering seventy and as found wandering all over the district. The names in common use among men are Apaiya, Chalaiya, Chandraiya, Eraiya, Guraiya, Niraiya, and Venkaiya; and among women Achamma, Gangamma, Jagamma, Kavaimma, and Laksmanamma. Their surnames are Kanare, Mayakalla, Medur, Nandale, Sanku, Shebul, and Vasardi. All belong to the Kashyap stock or *gotra*. Their family deities are Ambabai, Charbalaji of Tirupati, Durga Bhavani, and Ganpati in Telangan. Persons bearing the same surnames do not intermarry, but sameness of stock is no bar to marriage. They have no subdivisions. Their home tongue is a corrupt Telugu, and they speak broken Marathi abroad. They are strong, dark, tall, and well-built, and live in onestoreyed houses with brick walls and tiled roofs. They are moderate eaters and good cooks. Their staple food includes millet bread, pulse sauce, vegetables, and fish curry. Sweet wheat-flour cakes and spiced dishes are their chief dainties. They eat flesh except beef and pork, and drink liquor on any day except fast and feast days. Both men and women dress like local Maratha Kunbis and have a similar store of

ornaments and holiday clothes. As a class they are clean, orderly, hardworking, honest, and thrifty, but fond of show and hospitable. Their chief and hereditary calling is door-to-door begging. They also sell sacred threads or *janavas*, holy *rudraksha* berries Eleocarpus lanceolatus or gravitrus, whetstones, pieces of sandalwood, and sweet basil rosaries. They deal in sandalwood dolls and offer their wares in exchange either for cash or clothes. The women darn second-hand clothes and mind the shop when the men are away. Men go begging from six to eleven, dine at noon either at home or at some rich Brahman's, rest till two, and sit in their shops till dark. They are poor and burdened with debt. They are a religious class worshipping their family gods and all local gods and keeping all fasts and feasts. They ask a Telangi Brahman to officiate at their ceremonies and make pilgrimages to Alandi, Dehu in Poona, and Pandharpur in Sholapur. They belong to the Shaiv sect. They believe in witchcraft, soothsaying, and evil spirits. Early marriage, widow-marriage, and polygamy are allowed and practised; polyandry is unknown. Their customs do not differ from those of Maratha Kunbis. After sunset on the fifth day after the birth of a child the women of the house place a leather shoe or sandal under the pillow of the child to keep off evil spirits, worship a plate with an embossed figure of the goddess Satvai, and keep awake till morning. The mother's impurity lasts ten days, and she and the child are bathed and purified on the eleventh. The child is named on the twelfth by women who are asked to the house and friends and kinspeople are feasted. Boys are married between five and twenty and girls between five and eleven. Widow-marriage is allowed. They burn their dead and mourn ten days. Crows and Brahmans are fed on the tenth or eleventh by the chief mourner, and caste-people are feasted in honour of the dead. They remember the dead on their anniversary and on the day in the *Mahalaya Paksha* or All Soul's Fortnight in dark Bhadrapad or September corresponding to the death day. They have a caste council and settle social disputes at meetings of castemen. They send their children to school but do not take to new pursuits or show signs of improving.

UCHLIAS.

Uchlia's, [From materials supplied by Mr. S. Kyte, Police Inspector of Poona City.] or Lifters, also called **Bha'mta's** and **Gantha'chors** that is Bundle-thieves, probably number about 2000. They are found in Bhimthadi, Haveli, Khed, and Sirur. The nucleus of the Poona Uchlias seems to have come from the Telugu districts either of Madras or of the Nizam's country. Their home speech is a broken Telugu, and many of their names have a southern or eastern form. They are found

spread through the Deccan, the Berars, Gujarat, and other parts of Western India. They have no idea when and why they left their native country and no memory of having belonged to any other class of Hindus. Some, apparently correctly, state that they have been living in villages round Poona for four or five generations. The Poona Uchlia though called Bhamtas, are not true Bhamtas. The proper Bhamtas come not from the east or south-east but from the north. They are of Rajput descent. Their features are regular and pleasing, their skin is fair, and they an, generally well-made, sturdy, and active. They adopt many disguises. Even in their own villages, one dresses as a Marwar Vani, another as a Gujarat Shravak or Jain, a third as a Brahman, a fourth as a Rajput. They keep to some particular disguise for years and often travel hundreds of miles entering and stealing from the houses of the class of people whose dress they adopt. They sometimes give a false name for themselves and their village and take service with a merchant or trader of the caste to which they profess to belong. They act honestly for a time and take advantage of their employer's trust in them to make away with some large amount of property. Sometimes two or three Bhamtas visit a large fair and go to the river-side which is crowded with bathers and worshippers. One of the party dresses as a Brahman. He chooses a spot near the person whom he means to rob and while washing and repeating verses keeps his eye on the ornament he intends to steal. When the chance comes he moves close to the ornament and begins to spread out a cloth to dry. When he is near enough he catches the ornament in his toes, drags it with him, and buries it in the sand some distance off. The accomplices who are in waiting, walk close bye, loiter about for a time, and move on. When his victim misses his ornament and raises an outcry the Bhamta questions and grieves with him. He points out the accomplices and says he noticed them loitering about, perhaps it may be as well to look after them. The victim starts in pursuit, and the Bhamta digs the ornament out of the sand and makes off. At these holy bathing places women generally tie their ornaments in a bundle or put them in a box and sit close bye and take their meals. When they see a woman sitting with a bundle close to her a couple of Bhamtas come up. One of them walks close to the woman, the other stops a few yards off and sits down as if to ease himself. The woman turns in the other direction and the comrade whips off the bundle and buries it in the sand. If a Bhamta is caught nothing is found and he has to be set free.

The city of Poona is infested with Uchlias or southern Bhamtas. They are also found in the villages round Poona chiefly in Vadgav, Bhatgav, Karja, Phugya's Vadi, Pabal, Bopudi, Kanersar, Kondve, Mundhav, Talegaon, and Dhamari. Their numbers vary as some of them are

always on their travels. A rough estimate of the Uchlias of these villages gives about 250 at Vadgay, 200 at Bhatgay, 150 at Karja, 75 at Phugyachivadi, 300 at Pabal, 50 at Bopudi, 150 at Kanersar, 20 at Kondve, 50 at Mundhav, 75 at Telegaon, and about 100 at Dhamari, or a total strength of about 1420. All Poona Uchlias belong to one of two clans, Gaikvad and Jadhav. Except such low castes as Mangs, Mhars, Chambhars, Dhors, Buruds, and Telis, Uchlias admit all Hindus and Musalmans. In well known cases, Brahmans, Marwar Vanis, Sonars, Shimpis, and other upper and middle class Hindus have joined the Uchlias. If a good-caste Hindu or a Musalman wishes to become an Uchlia he makes a friend of some leading member of the caste and tells him that he wishes to become an Uchlia. If the Uchlia cares to have the candidate as a member of his family he takes him himself or he makes him over to any person who cares to have him. The candidate passes through two ceremonies, admission to the caste and adoption into a family of the caste. If an Uchlia who is a Jadhav takes the man who is to be initiated into his family, the new-comer claims to be and becomes a Jadhav; if the new-comer is taken into a Gaikvad family he claims to be and becomes a Gaikvad. They cannot explain how they came to be divided into Gaikvads and Jadhavs. Their forefathers, they say, may have been Maratha members of those two clans, or they may have taken service with Gaikvad and Jadhav Maratha chiefs and adopted their patrons' clan names. When an Uchlia agrees to adopt an outsider he calls a caste meeting and tells the castemen that if they allow the outsider to become an Uchlia he will adopt him into his family. The castemen fix the admission fee which generally varies from £1 10s, to £2 10s, (Rs. 15-25) and retire. Next day musicians are called, the candidate is bathed and dressed in new clothes, and, in proof of admission into the caste, one of the elders, without repeating any text or verse, drops turmeric and sugar into the candidate's mouth. A feast follows during which two or three of the caste elders sit with the novice and eat from the same plate with him. This completes the admission ceremony. Unless the new member is adopted into some family no Uchlia will give him his daughter in marriage. If the new-comer is adopted by a Jadhav a Gaikvad will give him his daughter, and if a Gaikvad adopts him he will get a wife from the Jadhavs, for Uchlias of the same clan-name may not intermarry. The adoption ceremony is performed by the person who adopts. He calls the caste to his house and in their presence seats the new-comer on his knee. The caste elders drop a pinch of turmeric powder or bhandar into his mouth and each of the other quests drops a little sugar into his mouth. Music is played and the quests retire with betel and leaves.

The names in common use among men are Bapu, Chinapa, Chandrya, Dolya, Dhagya, Ellapa, Gidapa, Gitu, Kushanna, Manku, Mukirya, Marya, Nathya, Phakirya, Parashya, Rama, Satpa, Satva, and Siralya; and among women Aku, Bhagi, Dolu, Dhondi, Elli, Jogi, Mukti, Mari, Manki, Navli, Rai, Rami, Rakhmi, Saki, Satvi, and Tuki. The Poona Uchlias are dark and of a Telugu or Dravid cast of face. People who know them say that their bodies are stiff from frequent beatings and that the water has been drained out of their eyes so that they cannot shed a tear. They have this saying regarding Uchlias because, even when caught in the act of thieving, no amount of kicking or slippering will draw a tear from the eye or a word from the tongue of an Uchlia except a profession of innocence.

The men wear the topknot, moustache, and whiskers, and sometimes a lock of hair over each ear. None wear the beard. Their home speech is a corrupt Telugu mixed with Marathi. No is lera, bread is impal, split-pulse *papu*, vegetables *kura*, butter *nei*, a turban *talbata*, a coat angi, the face nor, the nose muku, the lips lota, and the hair antkal. Why do you run is Yaduparay, Have you work to do Phani undaya, Are you going to dinner Impadati nimpaye, Don't get angry Siti gadak, What have you brought *Demti sakinasti*, Have you forgot a rupee Rupayachi kaya. They live in houses built of stone or brick with tiled roofs. Some have two-storeyed houses and generally their dwellings are as good as those of an average villager. Their houses are clean. Their house goods include copper and brass vessels of which they have more than enough for their wants. Some have only a few boxes and a grindstone and earthen pots piled one on the other in which they keep grain and condiments. An ordinary country-made cot with a carpet and pillow and bedding is their sleeping furniture. They keep cows buffaloes, ponies, fowls, and hogs, and cowdung their houses once a week on Tuesdays, Fridays, or Sundays. When rich and successful they make no show of wealth. Their aim is to seem fairly off, so as neither to attract the special notice of the police nor to arouse the jealousy of their neighbours. They eat the usual kinds of animal food including the flesh both of the tame pig and of the wild boar. They rear pigs. Each Uchlia keeps a few pigs within walled enclosures or straying about the village. Pork is not used at caste feasts nor on religious or festive occasions it is kept as a delicacy for small feasts. They catch wild pig either by noosing them or with the help of dogs. When the pig is secured its legs are tied and it is killed either by stoning or by blows of a club below the ear. It is roasted over a slow fire, skinned, cut in small pieces, and served with salt and chillies. They never kill the cow and never eat its flesh. They drink liquor to excess. Their staple food is millet bread, vegetables, and spices. A family of five spends 12s. to

16s.(Rs.6-8) a month on food. Their only feasts are in honour of marriages when they make cakes of sugar and oil. They copy the dress and manners of the villagers among whom they live, so that strangers may take them for ordinary husbandmen. The men wear a coat, waistcloth, shouldercloth, shoes, and a loosely folded Maratha turban. The men's ornaments are the earrings called *kudki* and *bali*, the necklace called kanthi, the wristlet called kade, and the waistband called kaddora. The women dress like Maratha women in a bodice with a back and short sleeves, and a full robe whose skirt corner is drawn back between the feet. They mark their brows with redpowder but do not wear false hair or deck their heads with flowers. They have clothes in store for big days worth £2 to £3 (Rs. 20-30). The women's jewelry includes ear, nose, neck, arm, feet, and toe ornaments, worth £1 to £2 (Rs. 10-20). The Uchlias show an honourable loyalty to one another. They never rob each other or tell on each other. If the police find stolen property in an Uchlia's house and the property does not belong to the owner of the house, the real Uchlia owner will come forward and take the blame on himself. Another rule they are careful to keep is that if an Uchlia manages to escape from prison he must not come back among his friends lest he should bring them into trouble. An Uchlia is never guilty of housebreaking or of gang-robbery with arms. These forms of crime he leaves to the Mangs and Ramoshis. If an Uchlia takes part in an armed gang robbery he is at once put out of caste. They are professional thieves and pocket-slitters, stealing between sunrise and sunset. They do not rob or steal after nightfall. They will not steal from a man when he is asleep in a house nor will they steal by breaking into a house at night. At fairs and other large gatherings they mix with the crowd and thieve. They are not particular as to what they steal. They pick an ornament off the wearer's body either by cutting it or opening it. They slip it away so light-fingeredly that some time passes before the owner knows that his ornament is gone. A favourite find is a bundle in front of a booth, laid down by some one close by, whose energies are centered in beating the boothkeeper in bargaining. However poor and unpromising the bundle the Uchlia does not despise it. His principle is to neglect nothing that fortune throws in his way. Before a party of Uchlias start on a thieving trip they consult and follow the advice of their headman who is called Patil or Thelungya, apparently the head of the thal or sthal that is the camping ground, for the Uchlias used to be wanderers. On their return they hand him an eighth of the spoil or two annas in the rupee. If everything goes well and the theft is not traced the headman spends his share on a caste feast with plenty of liquor, or if one of the thieves is caught the headman's share is spent on feeing a pleader to defend the accused. Sundays and Tuesdays are bad days for thieving; Uchlas

often let them pass without attempting a theft. If any friend of the tribe happens to be robbed he will get his property back if he satisfies the headman that he has befriended some one of the tribe. The man's plea of friendship is laid before a jury or panchayat. The jury will not admit the plea unless one of the tribe comes forward and declares that the claimant is a friend of the tribe. If some one comes forward the property is handed to the claimant, and the thief's loss is made good from public funds. Their code of honour is extremely high. Any breach of loyalty, any tale-telling against a brother Uchlia meets with the sharpest punishment. If one Uchlia charges another with telling against him the headman calls the caste men together. The accused is brought before the meeting and asked what he has done. If he can prove that the man he told was a friend of the tribe, even though the friend may be a constable, no notice is taken. If the tale-bearing is traced to spite, ill will, or jealousy, the informer is forced to pay the value of the property stolen and is marked as a traitor. If the accused denies that he told any one his innocence is tested by the oil-caldron or tel-kadai. Before the heads of the caste agree to refer the dispute to the oil caldron they make the accused enter into a written agreement that if the ordeal proves him a traitor, he will pay a fine to be fixed by the head of the caste. The fine is generally heavy, sometimes as much as £100 (Rs. 1000). When the caste-leaders agree to refer the matter to the caldron they ask a potter to make a *kadai* that is a large earthen caldron with a bowl-shaped body and a broad flat rim. For one kadai the potter is paid as much as 3s. (Rs. 1½). The reason of this high price is that the sacred caldron has to be made with the greatest care. The potter must wash before he begins to make it. He must bake it in a special kiln and see that nothing impure touches it. When the jar is ready the potter send word and the caste-council go to his yard and take it from his hands. The potter does not perform any ceremony on the caldron after it is baked nor does he tie anything round its neck. He is not recognized by the Uchlias as a priest nor does be perform any ceremonies for them in times of cholera. When the jar has been taken to the Uchlia's hamlet a quantity of sesamum-seed or til is brought and seven married women of good character are called They are made to bathe, are dressed in new clothes, and have their brows marked with redpowder, and their arms with turmeric powder. They sit in a line and clean the oil-seed fasting the whole day. When the seed is clean it is handed to the oil-presser or Teli. The oilman is made to wash himself, to clean his mil, and put in a new crusher, and for this he is paid 14s. (Rs. 7). When the oil is crushed the crusher is taken out, broken in pieces, and used as firewood for boiling the oil. The caste-leaders choose some lonely spot at which to hold the ordeal and a large body of the caste perhaps fifty friends of the accused and fifty

friends of the accuser, both men and women, go to the spot accompanied by the accused, the umpires, and music. When the spot is reached the accused is seated by himself fasting in a tent or booth. A fire is kindled, the caldron is set on the fire, and the oil, which is never less than ten pounds (5 shers), is poured in. When the oil begins to boil the accused is called. He comes from the tent with music accompanied by the umpires. When the accused comes out of the tent, he bathes, but worships no god nor is any image of any god put near the caldron. When the accused comes close to the boiling caldron a round stone of the size of a pigeon's egg is dropped into the oil. The accused calls in a lond voice, ' If I have spoken the truth may the oil be to me as milk.' The accuser answers in a loud voice, ' If he has told a lie may the boiling oil be to him as fire or as worse than fire.' The accused plunges his arm into the oil and draws out the stone. He shows the stone to the head of the caste and throws it behind his own back. The fire is allowed to burn out and the accused is led to his tent and watched to see if he is suffering. After twenty-four hours the caste-leaders call on him to wash his hand with cow's urine, cowdung, and sand. When his hand has been washed it is closely examined. If it has taken no harm the accused is acquitted and brought back to the village. If the accuser is not satisfied that the hand has escaped unhurt a goat is killed and the accused is made to use his hand in pulling off the skin. During the time of the ordeal, which generally lasts ten to fifteen days, the accuser feeds one-half of the company and the accused feeds the other half of the company. At the end the person who wins the ordeal is paid all his expenses by the person who loses, and, at the same time, is presented with a lace-bordered shouldercloth and a turban together worth £12 to £24 (Rs. 120-240). The loser further pays the caste council a fine of £6 (Rs. 60), which is spent on a caste feast. Oil-ordeals come off sometimes twice sometimes as often as ten times in the year according as disputes happen to be many or few. Cases of injury from the boiling oil are rare. The accused almost always comes off unhurt.

Uchlias go thieving in couples or in bands of six to twelve, sometimes all men, sometimes all women, and sometimes half men and half women. They do not wait to strip a victim of all his ornaments. Even if it is a child one ornament only is taken. The stolen property is never kept by the man who stole it. It is at once made over to the thief's partner, and, with the least possible delay, without stipulating any value,' is left by him with some Marwar Vani or Brahman receiver of stolen goods. After a time the Uchlia comes to the receiver and takes what he gives him without a grumble, even though he is paid less than one-tenth of its value. This is the road which leads many a Marwari to

wealth. Widows and other women who have no man to support them thieve. Women thieves, sometimes three or four together, attend fairs and big markets. They mark some child with ornaments and watch till the child's parents are in a throng watching a show or driving a bargain. Two or three Uchlia women come pressing up watching the show with their eyes, and, with their hands, or the lancet they carry in their mouths, loosening the ornament. The thief passes the ornament to her friend who makes off while the thief loiters about safe and unconcerned for if she is caught nothing is found. When they see no one about Uchlia women sometimes go into houses and take away clothes left to dry. If they find some one in the house they ask if soand-so does not live here or where so and so lives. Most of the Uchlias are well-to-do. Almost none are in debt and only the few clumsyfingered are badly off. In case of need they borrow from Marwar and Gujarat Vanis or from some one of their own caste. If they want money they seldom find it difficult to raise a loan. A few of them are moneylenders, lending money in a quiet way to their fellow-villagers. They have a good middle class social position. They are liked by their neighbour. They never steal from a house in their own village and many of the villagers directly or indirectly share in their gains. They claim and enjoy the standing of respectable Kunbis. Their humblemindedness and wish to please win the favour of the office-bearers and of the other leading men of the village.

Except that he seldom does any work, the home life of an Uchlia does not differ from that of an ordinary husbandman. The Uchlia's special life begins when he leaves his village for cities, market-towns, or fairs. After a few days' idling in the village one or two of them talk over the next big fair, agree on some thieving programme, and fix how the booty is to be shared. After making what they can out of the fair they generally spend much of their gains on liquor and return half-drunk to their homes. An Uchlia's expenses and his way of living do not differ from those of an ordinary Kunbi. A house costs £5 to £20 (Rs. 50-200) to build and 6d. to 1s. (4-8 as.) a month to rent. Their house goods vary in value from £2 10s. to £5 (Rs. 25-50); and the yearly cost of clothing a family of five varies from £1 10s. to £2 (Rs. 15-20). A birth costs 10s. (Rs. 5), a naming 8s. (Rs. 4), a hair-clipping 4s. to 6s. (Rs. 2-3), a boy's marriage £5 to £10 (Rs. 50-100), a girl's marriage £2 10s. to £5 (Rs. 25-50), a girl's coming of age 10s. to £1 (Rs. 5-10), a pregnancy 6d. to 2s. (Re. ¼ -1), and a death 16s. to £1 4s. (Rs. 8-12). They worship the ordinary Brahmanic gods and goddesses. Their favourite deities are Bahiroba, Bhavani, Khandoba, Mariai, Mhasoba, Vetal, and Yellama; those who worship Bahiroba fast on Friday, those who worship Bhavani on Tuesday, and those who worship Khandoba

on Sunday. The Bhavani of Tuljapur and Yellamma of Saundatti are most venerated by the majority of Uchlias. They have no particular form of worship. They visit the ordinary temples of these deities, bathe, and fall at the feet of the god and ask for health and good fortune. Their rites are performed under the guidance of the temple ministrant who gives them holy ashes or udi, and if they have been unsuccessful, advises them to offer a goat, give a feast, or be more regular in visiting the temple. They occasion-ally suffer from spiritpossession. When an Uchlia is attacked by a spirit the patient's friends call any one who is expert in casting out devils. Some Uchlias have a great name as devil-scarers. When one of these exorcists is asked to cure a person who is suffering from a spirit attack, he washes and puts on fresh clothes. He goes to the patient's house and drops in cense or ud into a fire in front of him. The fumes of the incense scare the spirit and make him say who he is and what he wants. If a promise is given that his wishes will be, granted the spirit generally leaves. They make pilgrimages to Alandi, Pandharpur, Jejuri, Bhimashankar, or wherever there is likely to be a crowd. They keep the usual Brahmanic and local fasts and feasts. For five days after the birth of a child the mother is held to be unclean and to make unclean any person or thing she touches. During each of these days the midwife rubs the mother and child with turmeric paste, oil, and scraps of cocoa-kernel bruised on a stone slab, bathes them in warm water, and lays them on bedding spread on the ground instead of on a cot. The time a mother remains apart varies from five days to a fortnight or even three months according to her husband's wish. During this time she is fed on rice and oil. On the fifth day a small silver plate with an embossed image of the goddess Satvai or Mother Sixth is laid in a new winnowing basket and in front of it are placed dry dates, a piece of turmeric root, a bit of dry cocoa-kernel, two betel leaves and a nut, and a little wooden box with redpowder. Some sweet food is laid before the image and all night long a lamp is kept burning before it. From this day the mother may move about the house and do the housework, but in wellto-do families she remains apart for several weeks. Instead of worshipping Satvai in the house on the fifth day some rub the mother's hands and feet with turmeric powder, cover her with a blanket, and take her to the village temple or some other spot where is a stone image of the goddess Satvai. The mother rubs red and turmeric powders on the goddess, offers seven different fruits, and bows before her with joined hands. On the twelfth day female friends and kinswomen are called and the mother and child are bathed and the child is presented with clothes, named, and cradled. The child's name is chosen by relations. Each woman present is given two betel leaves and a nut, a handful of gram, and grains of wheat boiled whole.

In the third month the parents of the child with their friends and relations go into a grove or garden outside of the village and worship the goddess Ran Satvai or the Forest Satvai, who lives in seven stones placed under a babhul or gum acacia tree. In the grove or garden they kill a goat, cook it and worship the goddess. The seven stones are marked with turmeric-powder redlead and vermillion, a cocoanut and a pomegranate are set close to them, frankincense is burned, and rice mutton and Indian or Italian millet bread are laid before the stones. The party sit to dinner and when dinner is over return home. What remains of the dinner is generally left in the grove or garden. On returning they sit for a while at the host's house and go to their homes. When a boy or girl is two or three years old its hair is cut for the first time. Most mothers promise to perform a vow in honour of some deity, generally of Satvai, if the child is brought safe through the first two or three years of its life. If the child reaches the age named its parents visit the shrine and pay the vow. On their return they call a barber and he cuts the child's hair. Some goats are slaughtered and the dressed flesh is offered to the deity. The ceremony ends with a caste feast. Uchlia boys are married between ten and twenty and Uchlia girls between seven and sixteen. When a man thinks of marrying his son, his friends and relations go to a family who have a daughter likely to make a suitable match. If they like the girl, they ask her in marriage in the name of the boy's father. If he thinks the match favourable, the girl's father gives an evasive answer, and sends some friends and relations to see the boy. If they approve of the boy, the girl's father sends the boy's father word that he agrees to the march. The boy's parents start for the girl's with music and trays of fruit and betel leaf. At the girl's the caste are met and all the women of the caste rub the girl's forehead with redpowder. The boy's parents present the girl with a suit of clothes and fix the date for the marriage without asking an astrologer. The marriage settlement consists of the boy's father paying £5 (Rs. 50) to the girl's maternal uncle. Besides this the boy's parents have to pay the girl's parents £10 to £20 (Rs. 100-200). Unlike most Poona Hindus Uchlias never consult a Brahman; they never ask Brahmans to officiate at any of their ceremonies. When everything is settled and the marriage day is fixed, the boy's father goes with his party to the girl's village and stays at a janvas-ghar or lodging provided for him by the girl's father. After the boy's party reaches the village, two marriage booths are built, one at the bride's the other at the brides groom's. The booth is covered with a floor cloth, adorned with festoons of mango twigs, and consecrated by breaking a cocoanut and sprinkling rice and curds. On the turmericrubbing day a square of rice is traced by the male guests. The bride and bridegroom are made to sit in the square. They are rubbed with

turmeric paste, and their brows are decked with flower wreaths. This turmeric-rubbing is repeated five times during the day. During each rubbing a Holar beats a drum and women sing. At six in the evening of the same day the boy goes in procession to the village temple of Maruti. He is then brought to the girl's where the boy and girl bathe in the booth. After their bath they are dressed in new clothes and made to sit on a blanket on a rice-traced square, the bride sitting to the left of the bridegroom. The brows of both are decked with tinsel chaplets and thread bracelets or kankans are bound round their wrists. While they are seated one of the guests asks the girl's father whether he has anything to say against the boy's parents; if he has nothing to say against the boy's parents the girl's father ties together the hems of the bride's and bridegroom's garments. The guests call out words like Nalekhal, telekhal, burekhal, sambandh batak, ichandagara, periyata, apparently, Tamil or Telugu, and throw yellow rice over their heads, and they are husband and wife. Copper coins are waved about their faces and given to the bridegroom's sister or karavli or to the women who sang during the marriage. At night the family deity is taken out of the house shrine and set in the booth, and a drinking pot filled with water is set before it. The mouth of the pot is covered with mango leaves and a cocoanut with an ear of millet is laid over the leaves. The guests and the married couple take their seats in the booth and Gondhalis perform the *gondhal* dance before the house deity. [A gondhal dance is described at p. 451. There is nothing special in an Uchlia's gondhal. The Gondhalis sing hymns in praise of the goddess Amba-Bhavani, and amuse the audience with lavanis or love songs and pavadas or ballads. The Gondhalis stay the whole night singing and dancing. About daybreak the bridegroom stands before the house deity, holding a platter with a burning lamp. One by one, the guests wave a copper coin about the bridegroom's face and drop the coin into the platter; 2s. 6d. (Rs. 1) is added and the whole is handed to the Gondhalis. On the same day a feast is given when goats are sacrificed to the family deity and their dressed flesh is served to the quests. After dinner, the bride is hid in a neighbour's house and the bridegroom is made to search for her. When he finds her he lifts her in his arms and with music carries her to the marriage booth. In the booth nearly an hour is spent in watching the boy and girl rub each other with turmeric paste, in untying their thread kankans, and in bathing them. On the third day a caste feast is given and the bridegroom is allowed to return to his village with his bride and party. As the procession crosses the boundary of the bridegroom's village a cocoanut is broken and rice and curds are mixed together and scattered as an offering to evil spirits. His son's wedding costs an Uchlia about £30 (Rs. 300). He presents the girl with the

manimangalsutra or luck-giving necklace, gots or silver bracelets, putlyachi mal or a gold coin necklace, todas or silver anklets, and three lugdas or robes of varying value according to the giver's wealth and perhaps each averaging about 16s. (Rs. 8). The girl's father gives the bridegroom a turban worth on an average about 12s. (Rs. 6), a coat worth 4s. (Rs. 2), a waistcloth worth 4s. (Rs. 2), and a pair of Maratha shoes. Uchlias allow widow-marriage and divorce.

When a girl comes of age she is held to be unclean for five days, and is made to sit by herself. During these five days she is fed on sweet dishes brought by her mother. On the fifth day she is bathed and dressed in new clothes. She and her husband are made to sit in a bower of four young plantain trees. When they are seated the boy's father presents the girl with a green robe and bodice, and the girl's father presents the boy with a turban and a waistcloth; and a married woman fills the girl's lap with five halves of cocoa-kernel, five dry dates, turmeric roots, betelnuts, rice, and a bodicecloth, a Holar all the time beating a drum. The ceremony is marked with a feast of wheat cakes stuffed with raw sugar; it costs £2 to £2 10s. (Rs. 20-25).

Uchlias burn the dead. When an Uchlia dies the body is washed and shrouded in a new white cloth. It is sprinkled with red-powder, flowers, and betel leaves, laid on a bier, and carried to the burning ground on the shoulders of four bearers preceded by music and the chief mourner carrying an earthen firepot. When a woman dies before her husband she is dressed in a green robe and bodice, her brow is marked with a horizontal stripe of vermillion, and her head is decked with a network of flowers, and a bit of gold and a packet of betelnut and leaves are put into the dead mouth. Her three ornaments, the galsari or necklace of black glass beads, the nose-ring, and the toerings, all three emblems of the married state, are put on and taken off at the burning ground. On their return from the grave the spot where the dead breathed his last is cleansed with cowdung, and sprinkled with sand, and the dead man's favourite food is cooked and laid close by with a vessel of water. The whole is covered over with a large basket. The food is so arranged that it leaves bare a portion of the sand-strewn floor. Next morning the basket is lifted and if the palm of a hand is found on the sand it is a good omen, for the dead is pleased and from his hand go out blessings to the family. The food is thrown away and the chief mourner's moustache is shaved. When a woman dies in childbirth, rala grains are thrown behind her body as it is borne to the burning ground, and a nail is driven into the threshold of the house to keep her ghost from coming in. In an ordinary funeral at the time of lifting the bier, the daughter, daughter-in-law, or wife of the

deceased waves a lamp round the dead face. Some grains of rice are tied to the skirt of the shroud. This rice is laid on the visava or restingplace where the bier is set down and the bearers change shoulders. When the body is laid on the pyre, the son drops water into the mouth, walks five times round the pyre, and again drops a little water into the mouth by squeezing a wet cloth. He kindles the pyre and sits there with the people who accompanied the funeral till the skull cracks. They then bathe and return home. The children mourn for three days and are held impure. On the third day the son with the four corpse-bearers and other near relations throws the ashes into water, and with a *nim* twig sprinkles the bearer's shoulders with cow's urine in the belief that the cow-urine eases the aching shoulders. Goats are slain and castemen and women are asked to dine on the river-bank in the burning ground. Before sitting to dinner they offer dressed food to the dead. After dinner all bathe in the river, wash their clothes, and return leaving behind them any food that remains. On the thirteenth day the son or other chief mourner shaves his face. The son makes a rice ball or pind, sets it in a winnowing basket, pours in oil, and with his friends and relations takes it to the burning ground. At the burning ground he makes a lump of earth in a roughly human shape and on the earth figure sets the winnowing basket with the burning lamp in it. Before the image red and scented powders are thrown. At the close of the worship, each person present pours a little water on the rude image and the son leaps into the water and leaves the basket and the ball under water. Next morning a cock is slain in the name of the dead, its flesh is dressed, and laid on a rui tree with some boiled rice as an offering to the crows. After the crows have eaten the company, with the son and other mourners, go to a river, bathe, and return home.

When a man or a woman is charged with adultery the men of the caste meet and hear the evidence. If they consider the guilt of the couple is proved they are taken to a river bank and the man's face and the woman's head are shaved. On the way back the culprits are pelted with balls of cowdung. A large dinner is given at the man's expense and he is made to touch the food before it is served to the castepeople. If the accused denies the charge in the teeth of good evidence an appeal is made to the oil-caldron. The tell-tale ordeal and the adultery ordeal differ in some details. In preparing the adultery oil-caldron the oil-mill is washed with water and rubbed with turmeric powder and vermillion. The bullock which is to drive the mill is made to fast and like the mill is rubbed with turmeric powder and vermillion. Fourteen married women, seven for the man and seven for the woman, fast all day and each drops a handful of sesamum into the mill. The oil-presser is also obliged to fast. While the oil is being

pressed the two accused stand near the mill and are asked whether they have committed the crime. They deny, and if their denial is true, oil does not oose from the seed; if what they say is false, oil flows freely. The roller of the mill is split and burnt under a pan and the oil is boiled. When it is boiling a copper coin or a stone is dropped into the oil, and the accused is forced to deny the charge brought against him and to pick out the coin or the stone. The accused is made to sit in a tent and is fed on rice, milk, and maccaroni. If the hand is found unharmed the person is declared innocent and presented with a turban and shouldercloth, and the accuser is made to pay the cost of the ordeal, which generally amounts to £35 (Rs. 350). If the hand is damaged the accused bears the whole cost besides any additional fine the caste-leaders choose to name. From the fine 14s. (Rs. 7) are paid to the Teli or oil-presser and a caste feast is given. When a charge is proved by ordinary evidence the accused parties, though they may deny the charge, are made to give a caste feast. Among the Uchlias the office of headman or thelungya is hereditary. There is also a panch or council chosen by the caste. On marriage and on other festive occasions, the headman gets a turban, uncooked food, and a cocoanut, and a goat's head if a goat is killed. The members of the council are recognized as the caste leaders, but no honours are paid them except giving them the chief seats at caste meetings. Though Mhars, Mangs, Ramoshis, Chambhars, and Buruds are not allowed to join the Uchlias men of these tribes are said occasionally to try to become Uchlias by passing themselves off as Marathas, Shimpis, or other respectable Hindus. If a candidate's caste is challenged the matter is referred to the oil-caldron. Cases are known in which Shimpis, Marwar Vanis, and Brahmans have joined the caste, remained with them, and married Uchla woman. Uchlias will eat from a Brahman, a Maratha, or other good caste Hindu if they are strangers. If a man of one of the latter classes comes and settles among them, they will not eat from him till he has undergone the regular entrance ceremony. Uchlias are not considered impure. In moving about on their thieving trips they never disguise themselves. They travel by rail as far as Madras or Calcutta and often rob their fellow-passengers. At a station an Uchlia watches the passengers. When he sees any likely person with property he buys a ticket for the place the likely passenger is going to. His comrades buy tickets for intermediate stations, choosing a station which the train will reach after dark. If the theft is committed sooner than was intended the Uchlia alights at the first station and makes over the property to his comrade or he takes his seat in a fresh carriage, or he gets out and lets the train go and follows by the next train. In picking or rather slitting pockets the Uchlia uses a small very carefully sharpened sickle-shaped knife. The

knife, which is called *ullimukh*, is carried under the tongue or in the cheek, the flesh being first toughened by carrying a lump of salt in the mouth. An expert pocket-slitter will talk, eat, and sleep with his lancet in his mouth. Uchlias have strict rules to prevent unchastity and adultery among their women. If a married woman is accused of adultery and denies the charge she has to undergo the boiling oil ordeal. One or two cases of this kind take place every year. If the woman confesses the man is called forward, and, according to the woman's cleverness as a thief, he is ordered to pay the woman's husband a fine of £35 to £70 (Rs. 350-700). In such cases the woman continues to live with the adulterer. The husband may if it suits him better wait and receive from the adulterer all his wife's earnings and £35 (Rs. 350) for each child born to him. The husband can also at any time claim £35 to £70 (Rs. 350-700) as damages whatever amount the caste may award him. If an unmarried girl is unchaste she is not allowed to marry one of the caste. A stranger from some other caste who has joined the community may marry her in the irregular or motra fashion. If kinspeople are caught committing incest the woman's head and the man's face are shaved and they are made to sit on a donkey, or they are pelted with balls of cowdung and forced to rum to a river to bathe followed by a hooting band of caste-people. On their way back from the river they are again chased by a hooting crowd. A large pot of food is made ready and touched by the culprits and the contents are eaten by the caste. No fine is levied, but the name manautia or cut-throat, the worst name which a man can get, sticks to the incestuous for life. Uchlias almost never steal from each other. When one Uchlia steals from another, however small the value of the article stolen, the thief is fined £6 (Rs. 60). The number of Uchlias is yearly increasing. Some, besides pocket-slitting, own fields which they either till themselves or let to husbandmen on the crop-share system. Within the past ten years a few of their boys have begun to attend village schools. Except under compulsion Uchlias are not likely to give up so safe, respectable, and gainful a calling as pocket-slitting. If the provisions of the Criminal Tribes Act (XXVII of 1871) were enforced against them, the Uchlias might be driven to honest work. Their thieving might also be made more difficult and less profitable by forcing them, whenever they leave their village, to take a passport and report themselves to a police officer when they reach their journey's end.

VAGHES.

Va'ghes are returned as numbering five and as found only in Purandhar. The males are called Vaghes, the females Murlis. A

childless Hindu generally of the Kunbi caste sometimes vows that if Khandoba blesses him with a child he will set the child apart to worship and attend upon him. Vaghes do not differ from Kunbis in look, speech, food, or dress. They are beggars who sing songs in praise of Khandoba of Jejuri and ballads or lavnis for the amusement of pleasure-seekers. Murlis, literally flutes, are girls wedded to Khandoba the lord of Jejuri. If a woman is childless she vows that if Khandoba blesses her with a girl she will be set apart for life to worship and attend on him. When she is born her father takes her to Jejuri and on a *somvati or* Monday full-moon in *Magh* that is February or Chaitra that is March the girl is rubbed with turmeric, dressed in a green robe and bodice, her brow is marked with redpowder, flower garlands are wound round her head, and she is made to stand in front of Khandoba. A cloth is held between the girl and the god and marriage verses are repeated by the priest of the temple. Turmeric powder is thrown on the heads of the girl and of the god and a ninecowrie necklace is tied round her neck and she is called Khandoba's wife. The temple priest is paid 2s. 6d. (Rs. 1¼) as her fee, the girl is called a Murli, and marries no other husband but the god. Their names and surnames are the same as those of Marathas. In look, speech, house, food, and dress they are like Marathas. Some of them stay at Jejuri, while the rest wander about the district and as far as Bombay, in bauds of three or four men and women, begging, singing songs, and playing on bells or *ghols*. Except their marriage with the god Khandoba they have no special ceremony or custom. Their social disputes are settled by the temple priest or *qurav* at Jejuri. As a class they are fairly off.

VAIDUS.

Vaidus, or Physicians, are returned as numbering 523 and as found in Haveli, Khed, and Sirur. They are divided into *Jholivales* or Bag-man, *Chataivales* or Mat-men, and *Dadhivales* or Beard-men who neither eat together nor intermarry. The surnames of the Jholivales or Bag-men, to whom the following particulars belong, are Akpra, Ambile, Chitkal, Kodganti, Manpati, Metkal, Parkanti, and Shingade, and persons bearing the same surname do not intermarry. They are dark, stout, and strongly made. The men wear the top-knot, moustache, whiskers, and sometimes the beard. Their home speech is Telugu, but out of doors they speak incorrect Marathi and Hindustani. They are a wandering people and camp outside of towns in cloth tents or *pals* which they carry with them on bullocks or donkeys. They keep dogs and domestic fowls. They eat fish and flesh except beef and pork, and drink liquor. Their staple food is millet, vegetables, and occasionally

wheat and rice and clarified butter. They are frugal in their use of clarified butter. However well-to-do a family is clarified butter is always served by dipping cotton in it and squeezing the cotton over the dining plate. The men wear the loincloth, an ochre-coloured cloak, waistcloth, or pair of short breeches, a headscarf or a red or white turban, and a necklace of coloured glass, stone, or coral beads, gold or brass earrings, and silver or brass finger rings. Their women wear a loose bodice with short sleeves and a back and the full Maratha robe, the skirt of which they pass back between the feet and tuck into the waist behind. They rub powder on their brows, wear false hair, and sometimes deck their heads with flowers. They are dealers in drugs and medicines, and, under the pretence of working cures deceive ignorant and simpleminded people, especially women. Both men and women generally visit the chief towns in the Poona district once a year, and disappear after disposing of their drugs and medicines either retail to villagers or wholesale to shopkeepers. They pretend to heal any disease from a simple cough or headache to hopeless dropsy or consumption. Besides gathering and hawking healing herbs, barks, and roots, they use many mineral medicines and poisons, and they and their women beg for bread. The women, in addition, as they walk plait date-mats, three feet by six, and sell them at about $1\frac{1}{2}d$. (1 a.). On halting at a village or town the men and women walk through the streets and lanes with one or two ochre-coloured cloth bags hung across their shoulders, containing, besides drugs, the skins of lizards, porcupine quills, tigers' claws, bears' hair and teeth, foxes' heads, and deadly poisons. The cloth sacks in which these articles are carried are tied either to both ends or to one end of a stick which is carried over the shoulder. As they move along, the Vaidus shout, Nadipariksha Vaid the Pulse-feeling Doctor, Mandur-Vaid, the Medicine-selling Doctor, Garmi-vaid the Heat-curing Doctor, Pitta Vaid the Bile-curing Doctor, and so on, shouting the names of men's and women's diseases. They also bleed, both by cupping and by applying leeches. They are Hindus and worship the usual Brahmanic and local gods and goddesses. Their family gods are Venkoba and Mariamma and Yallamma. On their big day, Dasara in October, they kill a sheep and drink liquor to their heart's content. They believe in sorcery, witchcraft, soothsaying omens, and lucky and unlucky days, and consult oracles. A woman is unclean ten days after the birth of a child. On the fifth day she worships five pebbles near a well or stream and feasts five married women with gram cakes. They marry their girls after they come of age and their boys after they are sixteen. On the marriage day the boy goes with his relations and friends to the girl's and is seated on a mat. The girl is brought in and seated on the boy's left. After the elders have made the boy promise to protect the girl and never to forsake

her, five married women, three from the boy's side and two from the girl's, approach the boy and girl and mark their brows with cowdung ashes or bhasm, and the day ends with a feast. Next, morning the boy and girl are seated on a mat and the five married women tie a marriage string or *garsoli* round the girl's neck. The skirts of their garments are knotted together and they are taken to the boy's house, where the knot is untied and the marriage ceremony is over. They either bury or burn their dead. If the deceased was a married man he is buried sitting, if unmarried he is laid on his back. They mourn the dead ten days. On the eleventh a Jangam blows a conch-shell and rings a bell in the deceased's house, and after receiving $1\frac{1}{2} d$. (1 a.) retires. A feast of mutton ends the death ceremony. They allow widowmarriage and polygamy, but not polyandry. A boy's marriage costs them £1 to £2 (Rs. 10-20), a girl's marriage 10s.to 12s. (Rs.5-6), and a death about 10s. (Rs.5). They have a headman or patil who settles social disputes at meetings of the castemen. If a person beats another with a shoe he is fined 1s. to 1s. 3d. (8-10 as.); a daughter abusing her mother-in-law is fined $4\frac{1}{2}d$. (3 as.) and in addition has to wash her mother-in-law's hands and feet, put a pinch of dust on her own head, and beg forgiveness; if she beats her mother-in-law she is lined 1s. 6d. (12 as.); and if she steals she is branded with a hot copper coin. If a man eats beef he is put out of caste and not allowed to come back. If a woman commits adultery with a Brahman or other highcaste Hindu she is fined. 10s. (Rs. 5), her husband is fined 6s. (Rs.3), and her parents 8s. (Rs. 4), and she is let back into caste. If she has intercourse with a Mhar or Mang or any other low-caste man she is put out of caste and never let back. They are not allowed to work as labourers. Any one found working for hire is put out of caste and not allowed back until he feasts the whole caste. The Jholivales do not send their boys to school. The establishment of Government and other charitable dispensaries, the increase in the number of medical practitioners, and the growing trust in English drugs, have ruined the Vaidus. They are now little better than beggars.

Da'dhivale Vaidus or Bearded Doctors are divided into Dhangars, Jhingabhois, Kolis, Khulekars, Ravals, and Vagmudis. The names in Common use among men are Rama, Malaka, Sayana, Govinda, Ismal, and Mutya; and among women Mukti, Yalli, Malli, Mukti, Rakhma, Thaki, Chimi, Radha, Ramu, and Lingi. They are black, ugly, and extremely wild-looking. Excepting beef they eat anything, and excepting a rag round their middle the men are naked, and the women wear no clothes except a cloth rolled round the waist and one end drawn across the breast. When they hawk their herbs and roots and barks they call *Vaila okhad*, A cure for wind; *Sardila okhad*, A cure for

cold; Narula okhad, A cure for guineaworm, and so on cures for all diseases which flesh inherits or acquires. Their wives grind quartz into the powder called rangoli, of which spirits stand in awe, and sell it at $1\frac{1}{2}$ d. to $2\frac{1}{4}$ d. ($1-1\frac{1}{2}$ as.) a pound. The marriage of a boy or girl costs them about 10s. (Rs. 5) and a death 6s. to 8s. (Rs. 3-4). They seem to have no idea of a god, do not keep fasts or feasts, and marry their women at any age. They make the couple stand face to face on a piece of cloth, a necklace is tied to the girl's neck, red rice is thrown on their heads by a Brahman, and the marriage is over. They bury their dead, mourn five days, and offer cooked food to the deceased on the house-tops, and feast caste-people with cakes and rice. They have a caste council who settle social disputes. They do not send their boys to school and are miserably poor.

VASUDEVS.

Va'sudevs are returned as numbering forty-two and as wandering all over the district. They are said to have come from Dwarka in West Kathiawar and to have settled in Poona about a hundred years ago. The names in common use both among men and women are the same as those used by local Kunbis. Their surnames are Hande, Kolavane, Konhere, Paigude, Sumalkar, and Vatsar; persons bearing the same surnames cannot intermarry. They are divided into Maratha Vasudevs and Kadu or Bitter that is Bastard Vasudevs, who eat together but do not intermarry. They are dark strong and well-made, and speak a corrupt Marathi. In look food and drink they do not differ from local Kunbis. They bathe every second day and worship with sandal-paste and rice the coronet of peacock feathers which they wear on their head while they go begging. As a class they are dirty, orderly, thrifty, and hospitable. They are hereditary beggars. They rise early, wash their hands and feet, put on a long coat reaching to the ankles, and a turban with a peacock coronet. They wrap a piece of red cloth round the waist, throw a wallet over the left shoulder, and take the cymbals or *chiplis* which they beat while they sing and move about the streets begging. The women mind the house and fetch firewood for sale. They never work and are very poor. They worship their family gods Bahiroba, Fringai in the town of Poona, Khandoba of Jejuri, and Mahadev of Signapur in Poona. They are Shaivs by sect and make pilgrimages to A'landi, Jejuri, and Pandharpur. Their priest is a Deccan Brahman who officiates at their marriages, and their religious teacher is a Maratha Gosavi. They worship all local gods, keep all Hindu fasts and feasts, and believe in soothsaying, witchcraft, and evil spirits. On the fifth day after the birth of a child the goddess Satvai is worshipped and the child is named on the twelfth. The mother's term of impurity

lasts six is days. Boys are married between seven and twenty-five and girls between three and twelve. Their marriage and death rites do not differ from those performed among Maratha Kunbis. They bury the dead and mourn seven days. They set a lamp on the spot where the dead breathed his last. On the return of the funeral party from the burning ground, they examine ashes strewn on the floor near the lamp, searching for the prints or marks of the animal into which the soul of the dead has passed. The death-day is marked by a mind-rite or shraddh and the dead are also remembered on the day in Mahalaya Paksh or All Souls' Fortnight in dark Bhadrapad or September which corresponds to the day of their death. The community is bound together by a strong caste feeling, and they settle social disputes at meetings of adult castemen. Breaches of caste discipline are punished with fine which takes the form of a caste feast. They do not send their children to school, nor do they take to new callings or show any sign of improving.

VIRS.

Virs are returned as numbering twenty-eight and as found in Purandhar only. They are divided into two classes, Virs proper and Dangat Virs, who eat together and intermarry. Their home tongue is a corrupt Marathi. They live in middle class houses one or two storeys high, with stone or brick walls and tiled roofs. Their, houses, which are often dirty, cost £2 10s. to £40 (Rs. 25 - 400). They have a store of copper and brass vessels worth 10s. to £5 (Rs. 5-50). They employ no servants but own cattle. They are great eaters and bad cooks. They are fond of pungent dishes and their staple food is bread, pulse, and vegetables. On their holiday they eat wheat cakes stuffed with boiled pulse mixed with molasses. A family of five spends 16s, to £1 10s. (Rs. 8-15) a month on food. These and the other estimates of monthly cost of living are framed on the basis that the family has to buy retail the grain and other articles it uses. The actual cash payments of the bulk of the middle and lower orders who either grow grain or are wholly or party paid in grain must therefore be considerably less than the estimates. The figures mentioned in the text are not more than rough estimates of the value of the articles which under ordinary circumstances the different classes of the people consume. They are careful to bathe before they take their food. When they can afford it they freely use strong drinks and eat the flesh of goats, sheep, fowls, and fish. They offer goats to their gods, kill the victims, and eat the flesh. They drink moderately and take opium and hemp-flowers. The men shave the head except the topknot, and the women tie their hair in a knot behind. They do not wear false hair or

flowers. The men wear a loincloth or waistcloth, a shouldercloth, a cap or a turban, and a pair of shoes. The women wear a robe hanging from the waist like a petticoat to the ankles and a short-sleeved loose bodice with a back. Neither men nor women keep clothes in store, and both use the same ornaments as cultivating Marathas. They spend no money on clothes as they get presents from rich visitors to Khandoba's shrine at Jejuri. Their hereditary and only calling is begging. Men women and children of ten and over beg either at their own village or in neighbouring towns and earn enough to keep them in fair comfort. As a class they are dirty and lazy, but honest, orderly, frugal, and hospitable. They rank themselves with Marathas but Marathas look down on them. They take their seats at Khandoba's temple at Jejuri and beg alms from pilgrims visiting the place, offering them the god's turmeric or bhandar. Their chief busy times are during the fairs in honour of Khandoba in Chaitra or April, Margashirsh or November, Paush or December, and Magh or January. As a class they are religious. Their family god is Khandoba. Their family priest is a Brahman, whom they highly respect and who is asked to officiate at marriage and other ceremonies. They worship Khandoba and visit no sacred place except his temple. Their religious teacher is a Gosavi, who belongs either to the Giri, Puri, or Bharati sect. He does not eat from their hands, but they wait upon him, get themselves initiated as his disciples, and present him with silver coins. He chooses his successor and a large number of ignorant and illiterate people follow him. They keep the usual Brahmanic holidays and fasts, worship local or village deities, and boundary gods and spirits, and offer them rice and pulse or meat. Their chief holiday is the bright sixth of Magh or January known as Champa-shashthi, on which the silver image of Khandoba is dressed and worshipped with great pomp. Their customs do not differ from the customs of Maratha Kunbis. Early marriage, widow-marriage, and polygamy are allowed, and polyandry is unknown. They form a separate community and settle caste disputes at meetings of the castemen under some wise elder who is chosen for the purpose. The decisions of the majority have the force of law on pain of loss of caste. Small offences are condoned by fines and serious offences by a caste feast. They send their boys and girls to school but do not take to new pursuits. They complain that pilgrims are stingier and less religious than they used to be. On the whole they are a falling class.

MUSALMANS.

Musalmans [From materials collected by Messrs. Syed Daud of the Bombay Municipality and Abdul Kasand, abkari inspector of Belgaum.]

numbered 42,036 or 466 per cent of the population. They include twenty-nine divisions, fourteen of which marry together and form the main body of regular Musalmans, and fifteen form distinct communities.

As far as the knowledge of the Poona Musalmans has been ascertained no trace remains of the conversions to Islam either under the Daulatabad (1318-1347), the Bahmani (1347-1490), Nizamshahi (1490-1636), or Bijapur (1636-1686) kings. Almost all claim to have been converted by Aurangzeb. This is probably a mistake. It is perhaps doubtful whether any of the Deccan dynasties made converts by force. But there were enthusiastic and successful missionaries who can hardly have failed to persuade certain classes of Hindus to embrace Islam. Of the number of Musalmans under the Peshwa no record has been traced. Especially in the city and cantonment of Poona it is evident that many classes of Musalmans have settled since the beginning of British rule. Among these are Memans and Bohoras from,Cutch and Gujarat; Gaikasabs from Maisur; and Attars, Gaundis, kaishgars, and Momins from Ahmadnagar, Haidarabad, and Sholapur.

Except that the men wear the beard, the local converts differ little in appearance from Deccan Hindus. The communities of outside or of part-outside origin are larger-boned and fairer-skinned, and have sharper and more marked features and larger eyes than the corresponding classes of Hindus. Except fresh settlers from Cutch and Gujarat, who speak Gujarati, and from Persia who speak Persian, almost all Poona Musalmans both villagers and townspeople speak Hindustani or Urdu. At the same time all the separate communities speak Marathi with more or less fluency.

Food.

The food eaten by Poona Musalmans varies partly according to their means and partly according to the custom of their native country. Rich and well-to-do Memans, Bohoras, and Persians, besides a cup of coffee or tea in the morning with milk, bread, and eggs, have two general meals, breakfast about ten or eleven, and dinner about eight or nine in the evening. Other classes of towns-men have only two meals, breakfast about ten or eleven and dinner between nine and ten. Village Musalmans take an early cold breakfast between five and six o'clock in the morning, a midday dinner about one in the fields, and a third meal on reaching home about seven in the evening. The town Musalman's staple food is wheat, rice and pulse, eaten with mutton or vegetable curry and fish. Among the richer townspeople public diuners are

generally of birydni that is a dish of rice, mutton, saffron, clarified butter, and spices; and jarda, a sweet dish of rice, sugar, almonds, pistachio nuts, and clarified butter. Middle-class townsmen and all villagers give public dinners of *pulao*, that is rice with clarified butter and mutton curry. These dinners are given on occasions of birth, circumcision, initiation, sacrifice, and marriage, and on the tenth and fortieth days after a death. The men take their dinner in the men's room first, and after the men leave, the women take their dinner in the women's room. In the men's dining room mats and carpets are spread for the guests and on the carpets large sheets called dastarkhvan are spread that the carpets may not be soiled. When the dinner is ready the guests sit in two rows facing each other. A man with a water jug and a basin comes in, and, beginning with the Syeds, pours water over the hands of each guest. Several young friends of the host stand between the rows of guests and pass the dishes. When all dishes are served the host says Bismilla that is In Alla's Name, and the guests begin to eat, a group of two or three men eating from the same dish. All the while the men are eating, one or two boys stand with waterpots ready to give water to any one who wishes it. When the dinner is finished the dastar-khvan or floor-cloths are removed, water is poured over the hands of each quest beginning with the Syeds, and trays with betel leaves are passed. Each quest takes a packet of betel aves, eats it with betelnuts cement and cardamoms, and retires. At the door stands the owner of the house to whom the quest as he retires makes a bow or salam, and leaves. The women take their dinner in the same way as the men but wait for some time after the dinner is over. To feed a hundred guests on birydni and jarda costs about £4 (Rs.40) and on pulao £1 10s. to £2 (Rs.15-20). A rich Musalman family of five spends 2s. to 4s. (Rs.1-2) a day or £3 to £6 (Rs. 30-60) a month on food; a middle-class family 1s. to 1s. 6d (8-12 as.) a day or £1 10s. to £1 15s. (Rs. 15-22½) a month; and a poor family 6d. to 1s. (4-8 as.) a day or 15s. to £1 10s. (Rs. 7½-15)a month. In spite of religious rules against intoxicating drinks most townsmen drink both imported wines and spirits and mahura spirits or bhevra. Of other stimulants and narcotics, tobacco is smoked by almost all and snuff is used by a few old men. Opium is used in small quantities by some beggars and servants. Hemp or ganja is smoked by many soldiers, constables, and beggars. In the town of Poona there are few large Musalman houses. But in the cantonment Musalmans own many large houses and residences rented to Europeans. Many rich Bombay Persians, Memans, and Khojas have built costly mansions where they live from July to October. These buildings are one to four storeys high of stone and mortar and timber. They cost £200 to £800 (Rs. 2000-8000) to build and £2 to £8 (Rs.20-80) a month to rent. Poor Musalmans live in hired

houses, or, when they can afford it, build a small one-storeyed house at a cost of £30 to £80 (Rs. 300-800). Village houses are seldom more than one storey high. Except the stone and mortar mansions of rich land proprietors they are of stone and clay and the walls are plastered with cowdung. On the poorest not more than £5 to £7 (Rs. 50-70) are spent; the rest cost £10 to £50 (Rs. 100-500) to build. In the Poona cantonment Musalmans live in hired houses. In all other parts of the district it is a point of honour with them that every family should have a house of its own.

Town Musalmans are generally fond of furnishing their houses with metal vessels, chiefly of copper coated with tin, and arranging them on wooden shelves along the walls. Among their furniture also are tables and chairs. Village Musalmans have no taste for furniture. Their house goods seldom go beyond copper and brass vessels, a cot, and large bamboo grain baskets.

Dress.

Town Musalmans are fond of good and clean clothes. The men wear a headscarf or turban, a shirt, a waistcoat, and an overcoat reaching to the knee. The women, except Meman Bohora and Persian women, wear the Hindu robe or sadi and the bodice or choli. Meman women wear a long shirt called aba, falling to the knee, and a pair of loose trousers rather tight at the ankle; Bohora women wear a petticoat either of silk or of chintz, a headscarf or odna over it, and a backless bodice. On going out they also wear a large burkha or cloak which shrouds the whole body except a gauze opening for the eyes. Persian women wear a costly silk petticoat, a loose short silk shirt, and embroidered slippers. Village women wear the Maratha robe passing the corner of the skirt back between the feet and the backed and short-sleeved bodice with the ends tied under the bosom. The everyday dress of the women is generally of cotton, and the ceremonial dress is either of silk or silk with silver embroidery. A rich townsman's wardrobe is generally worth £20 to £30 (Rs. 200-300), and a middle class man's £5 to £7 (Rs.50-70). A poor man makes one or two suits worth 10s. to £1 (Rs. 5-10) either on yearly festivals or whenever the old suit is worn out. A rich woman's wardrobe is generally worth £30 to £40 (Rs. 300-400), a middle class woman's £6 to £10 (Rs.60-100), and a poor woman's £1 to £2 (Rs. 10-20).

Ornaments.

Except some of the lower classes, butchers, fruiterers, water carriers, and sweepers, who when they can afford it are fond of wearing a large gold ring in the right ear and a silver chain weighing one or two pounds on the right foot, Musalman men seldom wear ornaments. Almost all Musalman women begin married life with a good store of ornaments. Their parents must give them at least one nose-ring or nath, a set of twelve golden earrings, and twenty silver finger rings, and their husbands must invest in ornaments for the bride as much money as the amount of the dowry which is generally £12 14s. (Rs. 127). In poor families the women seldom keep their full stock of wedding jewels. Most disappear by degrees to meet special expenses and to help the family through times of scarce food or of scanty labour. Roughly a rich woman's ornaments vary in value from £50 to £100 (Rs. 500-1000), a middle-class woman's from £20 to £30 (Rs.200-300), and a poor woman's from £5 to £10 (Rs.50-100).

Calling.

Of town Musalmans some are tradesmen and a good many are craftsmen. The bulk are soldiers, constables, messengers, and servants. Of village Musalmans the greater number are husbandmen and the rest are craftsmen. Among the regular classes, especially among town traders soldiers constables messengers and servants, the women add nothing to the family income. On the other hand in many of the special communities and among husbandmen weavers and other craftsmen and petty shopkeepers, the women earn almost as much as the men. Though hardworking, most servants and craftsmen and a few petty traders are wanting in forethought and are excessively fond of drink and good living. Village Musalmans, especially husbandmen, are thrifty. Traders and some servants and craftsmen are well-to-do. With these exceptions the Musalmans as a class are badly off. Most of them are in debt and in some cases hereditary debt is handed from father to son. Sameness in faith, worship, manners, and customs binds Musalmans into one body. Except some families of Khojas or Mastalian Shias and Daudi Bohoras or Ismailian Shias, perhaps about two hundred Poona families in all, Musalmans are Sunnis in faith. They respect and obey the same kazi, worship in the same mosque, and bury in the same burial ground. Among special or local communities the fruiterers or Bagyans, the mutton-butchers or Kasais, the bricklayers or Gaundis, and the masons or Takaras have such strong Hindu leanings that they do not mix with other Musalmans. They almost never go to the mosque, they eschew beef, keep Hindu holidays, aud openly worship and offer vows to Hindu gods.

Religion.

Of the regular Musalmans perhaps about ten per cent teach their children to read the Kuran. All of them are careful to circumcise their male children, to perform the initiation or bismilla ceremony, and to have their marriage and funeral ceremonies conducted by the *kazi* that is the jadge or by his deputy or *naib*. Though most do not daily attend the mosque, almost all are present at the special services on the Ramzan and Bakar-Id festivals, and are careful to give alms and to pay the kazi his dues. Their religious officers are the kazi or judge but now chiefly the marriage registrar, the *khatib* or preacher, the *mulla* or priest, and the *mujavar* or beadle. The *kazi*, who in former times was a judge as well as a marriage-registrar, now only registers marriages. He is helped by his deputy or *naib* who attends all village weddings and the marriages of middle-class and poor Poona townspeople. The marriage fee is 5s. (Rs. 2½) and the remarriage fee 10s. (Rs. 5). The khatib or prayer-leader formerly enjoyed grants of land. At present their office has almost disappeared and the mosque services are led by any learned layman or by a *Maulavi* or law-doctor. The *bangi* or crier keeps the mesque clean, shouts the prayer-call five times a day, and calls guests to marriage and other ceremonies. [He calls from the highest place in the mosque, before sunrise 'Alla is great 'Alla is great' (this four times over): I bear witness, there is no God but Alla (this twice); I bear witness Muhammad is His Prophet (twice). Come to pray (twice); come to salvation (twice); prayers are better than sleep (twice); Alla is great (twice); there is no God but Alla (once), Exeept that the words 'prayers are better than sleep' are left out the call to each of the other four prayers is the same. This is the Suni form. Shias after the words 'come to salvation 'add' come to a good act' (twice). They never use the phrase ' prayers are better than sleep.' They are poorly paid and live chiefly on alms and gifts of food and clothes. The mujavar or beadle attends at the shrine of some saint. He keeps the shrine clean and lives on the offerings that are made to the saint. Besides the religious officers certain Pirzadas or sons of saints hold a high position among Musalmans. They are spiritual guides and have religious followers chiefly among weavers and the classes who live by service. These Pirzadas live on estates granted to their forefathers by the Musalman rulers of the Deccan. Carelessness and love of show have forced most of them to part with their lands and they are now supported by their followers.

Customs.

Except Bohoras and Persians, almost all Musalmans believe in saints to whom they pray for children or for health and offer sacrifices and gifts. Most craftsmen and almost all husbandmen believe in Mhasoba, Mariai, and Satvar, Hindu deities to whom they make gifts and offer vows and whom they worship either publicly or privately. To Mhasoba or Buffalo-father, after they have gathered their last crop, husbandmen offers goats, and believe that he guards their fields from being robbed. The mutton-butchers or Kasais, the fruiterers or Bagvans, the water-carriers or Pakhalis and other lower classes believe that Mariai is the goddess of cholera, they worship her in sickness, and offer her sacrifices. Satvai or Mother Sixth is considered the goddess of fate. Women alone believe in Satvai and worship and make offerings to her on the sixth night after a child is born. Town Musalmans generally marry their boys between sixteen and twenty and their girls between ten and fourteen. Almost every ones is anxious to have his daughter married before she comes of age. Villagers generally marry their children earlier than townspeople. The observances in towns and in villages are the same except that in villages they are less costly. Chiefly because of its expense the practice of betrothal has nearly died out. A few rich or well-to-do families have a betrothal a year or six months before the marriage when the boy and girl are very young, or a month or two before the marriage if the couple are of age. If all is ready beforehand some hold the betrothal within a week of the marriage. A betrothal costs £4 to £8 (Rs. 40-80). A few days before the marriage a lay doctor or other learned man is asked to choose a lucky day for the wedding. He is told the names of the boy and girl and finds out from his books what days will be lucky for people of those names. From the day he fixes the wedding observances begin and last six days. The first four days are spent in rubbing the bride and bridegroom with turmeric. This is done twice a day in the morning and in the evening. In the afternoon of the fifth day henna, is brought from the bride's house by her sister, who sits behind a curtain with two or three of her friends who accompany her, and rubs it on the bridegroom's palms and is given 4s. to 10s. (Rs. 2 - 5). The henna is rubbed both on the palms of the bride's hands and on the soles of her feet. After the henna-marking, dinners are given at the bridegroom's first to men and after the men leave to women. About ten o'clock in the evening the bridegroom's friends and kinsmen set him on horseback and escort him to the bride's in a large procession, with music and torches. The bridegroom is dressed in a large red or white coat falling almost to the ground called jama, an embroldered silk red turban or mandil, and a silk waistscarf. A red cloth with a cocoanut in it is tied on his lap or godi. Over this dress a cloak of jasmine or other flowers covers the body from head to foot. Before starting lemons are

thrown over the bridegroom's head to the four quarters of heaven and a cocoanut is dashed to pieces on the ground in front of him. At the bride's, before he alights from his horse, the bride's brother gives the bridegroom hot milk or sugared water that his married life may be sweet. A cocoanut is dashed on the ground before him and lemons are cut and thrown over his head to the four quarters to scare evil spirits. The bridegroom then enters the marriage-porch or hall which has been built a few days before the beginning of the marriage. On the day the porch is built, a cocoanut tied in yellow cloth is hang on the chief pole to ward off spirits. In this hall the bridegroom's party find a few of the bride's kinsmen and he and his friends take their seats. The kazi or the deputy *kazi* is called to register the marriage. He makes the bridegroom and the bride's father sit facing each other, and making each hold the other's right hand, begins to register the marriage. After the marriage is registered and the sum stipulated for the girl's dowry is entered, the bridegroom says before all present that he has chosen her as his wife with the said sum as dowry. The bride's father declares that he gives his daughter to the bridegroom in marriage with all lawful ceremonies and with a certain sum as dowry. After this the bridegroom embraces his father-in law and shakes hands and bows low to all present. Till two or three in the morning the bridegroom sits in the booth or hall listening to singing and dancing girls. About dawn the bride's brother calls the bridegroom to the women's room. The bridegroom goes by himself and in the women's room finds all unveiled except the bride, because women need not be veiled before either a bridegroom or a king. In the room a songstress or domni [Domnis are married low-class Musalman women who take to singing as a way of earning their living. They are paid 2s. to 5s. (Rs. 1. 2½) for singing at a wedding. seats the bridegroom and the bride on a cot on different aides of a red cloth or curtsin which is held by two women. While the *domni* sings a piece of red thread is thrown over the curtain and the bride and bridegroom throw rice on each other over the curtain. When the song is ended the domni asks the bridegroom to take down the red curtain and his bride's face is shown him in a mirror. The bridegroom looks at her face, reads the first verses in the Kuran on which his eye happens to fall, and presents the bride with a ring or other ornament. Both come down from the cot. A large vessel full of red water is brought before them. A ring from the bride's hand is dropped into the water and the bride and bridegroom are asked to see who can first pick out the ring. Whoever is first will rule the house. The bride is generally helped by some friend or her sister and she generally wins; in fact she is allowed to win. Four round bamboo or cocoa-palm leaf sticks called chhadis, about as thick as a quill-pen and about eighteen inches long, are covered with flower garlands generally

jasmines. Two of them are given to the bride and two to the bridegroom, and they are asked to beat each other with them. When the sticks are broken the women present begin to throw slippers at the bridegroom. Besides slippers they throw onions, potatoes, and brinjals. After this, the bride and bridegroom are led into the cook-room. The bride is asked to knead wheat-flour and the bridegroom to bake it. While they are making the cakes, the women stand and laugh at the bridegroom. After the bridegroom has baked one or two cakes, the bride and bridegroom are brought back into the women's room. The bridegroom stands and bows low to all the women present, each of whom gives him a handkerchief and a silver or gold ring called chhala., Besides the ring and handkerchief the mother-in-law gives a turban or a headscarf. The whole ceremony is called *jalva* or rejoicing. After this the bridegroom goes back to the men's room and sits there till ho takes his bride home in the evening. Next day two separate dinners are given by the bride's father to men and to women. Towards evening the bridegroom lakes the bride to his house in a palanguin with the same pomp in which he came to her house. The first five Fridays after the marriage are kept as Jumagis or Great Fridays when a few friends and relations are asked to dine and the women spend the evenings in singing.

Musalmans have no observance when a girl comes of age. Most lower class Musalmans in a woman's first pregnancy mark the seventh month or *satvasa* by bathing the girl and dressing her in her jewels and richest clothes. A few women friends are asked to dinner. In the evening the pregnant woman and her husband are seated side by side on a carpet in the women's room. The women sit round singing and throw flower garlands round the husband's and wife's neck and put them on their wrists. They present the woman with a piece of silk or a cotton bodicecloth, and the husband with a handkerchief. When this is done the husband goes out, and the women spend the night in singing and making merry. This ceremony costs £1 to £2 (Rs. 10-20).

As soon as possible after a child is born, either its father if present, or its maternal uncle, repeats the Musalman call to prayer, that the name of Alla may be the first sound that falls on the babe's ear. Either a dagger or a knife is laid under the mother's pillow and is kept there forty days. The child and the mother are washed in water in which *nim* leaves have been steeped and the mother keeps her bed twelve days. For the first three days the child is fed on honey, and the mother on wheat-gruel prepared with clarified butter. On the sixth day, most women keep the sixth or *Chhati* ceremony. Women bathe the child, dress it in a red or yellow shirt, and lay it on the ground before a

clarified butter lamp with twelve wicks. Before this lamp is laid bread, boiled rice, vegetables, curry, and the liver and heart of a goat. If the child looks at the lamp it is considered lucky. The women spend the rest of the night in singing and merriment. The object is to pleases the fateful spirit of the sixth and persuade it to write a good future for the child. On the twelfth day the mother takes her first bath and from that day is considered able to walk. For forty days she remains impure and unfit to pray. [A lying-in woman is held impure and is not allowed to touch the Kuran or to pray for forty days. During all this time she ought not to cook, but in poor families a woman is allowed to cook after the twelfth day.] In the early morning of the fortieth day the woman bathes in hot water in which *nim* leaves have been steeped and while she bathes she repeats verses from the Kuran. Between four and six men guests come and dine in the men's rooms. About six o'clock after the men have gone the women come and dine in the women's rooms. The dinner is over about eight. After the dinner is over, each of the guests presents silver wristlets and anklets to the child and a bodice to its mother. After the presents have been given the women sit up all night singing, and go home before daylight. According to his means the father of the child spends £5 to £10 (Rs. 50-100).

When a child, whether a boy or a girl, is four months and four days old, or sometimes before or after that date, the sacrifice or akika is performed by killing one goat if the child is a girl and two goats if the child is a boy. The goat must be without spot or blemish and all its limbs must be perfect. A few friends and relation are asked to dine, and the goat is eaten by all except by the parents of the child who may not eat the flesh of the sacrifice. A sacrifice ceremony costs the child's father £3 to £6 (Rs. 30 - 60).

In a rich or well-to-do family, when the child is four years four months and four days old, comes the Initiation or *Bismilla*, that is In Alla's Name. On the day before the ceremony the boy or the girl is bathed and clothed in a rich dress and with great pomp is taken in procession round the places where Musalmans live and along the high road. On returning home, an old *maulavi* or law-doctor is called. He seats the child near him and in a loud voice repeats the word *bismilla* In the Name of Alla, and tells the child to repeat it after him. The child says *bismilla* and prayers are offered and dinner is served. The women spend the night in singing and merrymaking. The cost of the ceremony is £2 to £4 (Rs. 20-40).

Circumcision.

Every Musalman is anxious to circumcise his son when he is seven years old. A circumcision is attended with as much pomp and cost as a marriage. For two or three days before a circumcision, as before a marriage, the boy is rubbed with turmeric and bathed. On the fourth day about four in the afternoon the father's friends and kinsmen seat the child on horseback and go about the streets with music. In the evening a barber is called and the boy is circumcised. To dull the pain some boys are given *ganja* or hemp-seed or some other drug. The barber is paid *2s. 6d.* to 5s. (Rs.1¼-2¼) and when the boy is well is preseated with rice, cocoanuts, sweetmeats, and a suit of old clothes and money. In honour of his recovery a grand dinner is given to friends and relations. A circumcision costs £4 to £20 (Rs.40-200).

Death.

When no hope of recovery remains, the chapter of the Kuran which tells of death and the glorious future of the believer, is read, the creed and prayers for forgiveness are repeated, and a few drops of honey or sugared water are dropped into the dying mouth. As soon as life is gone the eyes and month are closed. Arrangements are made for the burial. A priest or *mulla* is sent for and prepares a large white sleeveless cotton shirt called kaphni that falls from the neck to the feet, a waistcloth or *luntgi*, and two sheets, and if the dead is a woman an additional red headscarf or odhni. The body is bathed and scented with camphor, aloe-powder, and rose or sandal scent, and each of the family takes a last look. The mother says, 'I withdraw all the claims I have upon you as your nurse;' the wife says, I give up all claim to my marriage portion.' Then, amid the wailing of the women, the body is laid in the bier and raised on the shoulders of four friends who raise the cry La-il laha-illa-allah 'There is no God but Alla.' On their way to the burial ground the bier is taken to a mosque where all the attendants pray and then move along the road until they reach the grave-yard.

At the burial ground the grave is dug and all present pray for the peace of the soul, and the body is laid in a hollow dug in the side of the grave, and left on its side the head facing Mecca or the west.

When the grave is closed the *mulla* or the *kazi* repeats the creed, and they return to the house of mourning where all offer a parting prayer and withdraw. A burial costs £1 10s. to £3 (Rs. 15-30). On the morning of the third day a ceremony called the *ziarat* or meeting is held in the house of mourning. A large party of male and female friends and relations meet either at the dead man's house or in the

mosque, the women sitting alone in the house in the women's room. The Karan is read and prayers are offered. After prayers a tray of rose or jasmine flowers and sabja or green leaves, and a cup with a sweet-smelling mixture of sandalwood or rose or other sweet oil, with aloe powder are handed among the guests. As the tray passes him each guest picks a flower and dips it into the cup. The whole is then taken and poured over the grave. Parched rice and pomegranates, plantains, oranges, and guavas are handed round and the guests leave. The cost of the third day varies from 10s. to £1 (Rs. 5-10). Among the poor a great dinner on the tenth, costing £2 to £6 (Rs. 20-60) ends the mourning. The rich and well-to-do offer alms and give a small feast to friends and relations on the twentieth, thirtieth, and fortieth days, and also at the end of six months.

Prospects.

During the last thirty years the spread of English education among Hindus and Parsis has led the Poona Musalmans to teach their boys English. Many of them, especially in the cantonment, have learnt English, and are employed as Government and railway clerks, and have risen to high positions in the police and in the army.

Divisions.

The main body of Musalmans who intermarry and differ little in looks, customs, or dress, besides the four main classes of Syeds, Shaikhs, Moghals or Persians, and Pathans, includes ten special communities. Of these two, Attars or perfumers and Manyars or bracelet-sellers, are traders; seven, Barutgars, Kafshgars, Kalaigars, Patvegars, Rafugars, Rangrezes, and Sikalgars, are craftsmen; and one, Mahawats or elephant-drivers, are servants. Of the fifteen separate communities who do not marry with the main body of Musalmans and differ from them in customs, three are outsiders, Mehmans and Bohoras, traders from Cutch and Gujarat, and Gaokasabs or beef-butchers from Maisur. The rest of the twelve classes are of local origin. Three of these Bakar Kasabs or Lad Sultanis mutton-butchers, Tambolis or betel-sellers, and Bagbans or fruiterers are traders; five, Gaundis bricklayers, Momins weavers, Pinjaras cotton cleaners, Saltankers tanners, and Takaras stone-masons, are craftsmen; and four, Bhatyaras cooks, Dhobis washermen, Halalkhors sweepers, and Pakhalis water-carriers, are servants.

Of the four leading Musalman classes Syeds, Shaikhs, Moghala or Persians, and Pathans, all except the Persians are large communities whose members are found throughout the district.

SYEDS.

Syeds or Elders properly the descendants of Fatima the daughter and Ali the son-in-law of the Prophet Muhammad, are found if large numbers both in towns and villages. They are said to have settled in the Deccan from the beginning of Musalman power that is from the close of the fourteenth century. They speak Hindustani at home and Marathi abroad. The men take Syeds before or sha after their names, and the women add bibi or begam to theirs. Though by intermarriage with the women of the country they have lost most of their peculiar appearance still Syeds are larger-boned and better-featured than most local Musalmans. Their women also are fair and delicate with good features. The men shave the head, wear the beard, and dress in a headscarf, a shirt, a waistcoat and an overcoat long enough to reach the knees. The women wear the Hindu robe and bodice, and neither appear in public nor add to the family income. The men are landlords, religious teachers, soldiers, constables, and servants. They are much given to luxury. They are Sunnis of the Hanafi school, and are religious and careful to say their prayers. They respect and obey the Kazi, and do not observe Hindu customs. They have no special class organization, but try to marry among themselves. They take wives from Shaikhs and Pathans but except in a few cases give their daughters only to Syeds. They teach their boys Persian, Arabic, and Marathi, and of late many have learnt English and secured service as Government clerks and constables.

SHAIKHS.

Shaikhs in theory take their origin from the three leading Kuraish families, the Sidikis who claim descent from Abu Bakar Sidik, the Farukis who claim descent from Umar-al Faruk, and the Abbasis who claim descent from Abas one of the prophet's nine uncles. As a matter of fact the bulk of the Shaikhs are chiefly if not entirely of local descent. The men take Shaikh or Muhammad before their names, and the women *bibi* after theirs. They do not differ from Syeds in appearance and like them speak Hindustani at home. The men either shave the head or let the hair grow, and wear full beards. Townsmen dress in a headscarf, a shirt, a waistcoat, a long overcoat, and a pair of loose trousers; and villagers wear either a waistcloth or a pair of tight trousers, and a shirt with, on going out, the addition of a large

Hindu turban. Their women are also like Syed women delicate, fair, and well-featured. They wear the Hindu robe and bodice, and except a few elderly women none appear in public or add to the family income. Both men and women are neat and clean in their habits. The men are husbandmen, soldiers, constables, messengers, and servants, and are hardworking and thrifty. They have no special class organization, and marry either among themselves or with any or the leading classes of Musalmans. They are Sunnis of the Hanafi school and are religious and careful to say their prayers. They respect and obey the Kazi and employ him to register their marriages. They teach their children Persian and Marathi, and of late English. Many are employed as clerks and have risen to high posts in the army and police.

MOGHALS.

Moghals are found in small numbers in every town and village of Poona. They claim descent from the Moghal conquerors of the Deccan in the seventeenth century (Abmadnagar 1630; Bijapur 1686). By intermarriage, and probably because many of them are local converts who took the name Moghal from their patron or leader, they have entirely lost their foreign appearance. Among local Moghals, the men shave the head and wear the beard full They dress like other Musalmans in a headscarf or a turban, a long overcoat, a shirt, a waistcoat, and a pair of tight trousers. The women are like Syed and Shaikh women and like them wear the Hindu robe and bodice. The men add *mirza* to their names, and the women *bibi* to theirs. They are soldiers, constables, servants, and husbandmen. In religion they are Sunnis of the Hanafi school. Some who have learned English have found employment as clerks and in the police.

PATHANS.

Pathans are found all over the district. They claim descent from the Afghan mercenaries and military leaders who conquered or took service in the Deccan, but most of them are probably descended from local converts who took the name of their leader. The men are tall or of middle height, well made, and dark or of olive colour. They shave the head, wear the beard full, and dress in a turban or headscarf, a shirt, a waistcoat, and a pair of tight trousers. The women, who are like the men in face, wear the Hindu robe and bodice, but neither add to the family income, nor appear in public. Both men and women are neat and clean in their habits. The men are husbandmen, soldiers, constables, servants, and messengers; and are hardworking and thrifty. They do not observe Hindu customs, or differ from other

Musalmans in their practices. They have no special class organization, and marry either among themselves or take wives from the Shaikhs and other classes of the main body. They respect and obey the Kazi, and employ him to register their marriages, and to settle their social disputes. They teach their boys Hindustani and Marathi, and of late years some have begun to send their boys to English schools.

ATTARS.

Atta'rs, or Perfumers, are found in small numbers in almost all towns and large villages. They are local converts, who, according to their own account, were converted during the time of Aurangzib (1658-1707). They are either tall or of middle height, well made, and dark or olivecoloured. Their women are fair and delicate with good features. The men shave the head, wear the beard full, and dress in a Hindu-like large white or red turban, a coat, a shirt, and a pair of tight trousers. Their women dress in the Hindu robe and bodice, and except the old none appear in public or add to the family income. Both men and women are neat and clean in their habits. The men have perfume shops selling frankincense, agarbatti, argaja, pomatum, rose, and other flower scents, missi or black tooth-powder, kunku or redpowder for Hindu women's brow marks, yellow and red thread called *nada* and thread garlands called sahelis which are worn both by Hindu and Musalman children during the last five days of the *Muharram*. They are hardworking and thrifty, but of late years have suffered from the competition of English lavender and other scents. Most of them travel from village to village selling their stock. Townsmen earn £20 to £30 (Rs. 200-300) a year, and can save for emergencies. The villagers live almost from hand to mouth. Most of them have left their calling and have taken to new pursuits, some taking service and others acting as messengers and constables. They are Sunnis of the Hanafi school, and are said to be religious. They do not follow Hindu customs, or differ from other Musalmans in their manners or beliefs. They marry either among themselves, or take wives from any of the leading Musalman communities. They have no special class organization. They obey and respect the Kazi, and employ him to register their marriage and to settle social disputes. They teach their boys Marathi and Hindustani. None have learned English or risen to any high post,

BARUTGARS.

Ba'rutgars, or Firework-makers, are found in small numbers in Poona and in some of the larger towns. They are mixed Hindu converts, converted according to their own account by Aurangzib. The men take

the title of Shaikh. They are either tall or of middle height, and dark or olive-skinned. The men shave the head, wear the beard full, and dress either in a turban or a headscarf, a waistcoat, and a pair of tight trousers or a waistcloth. The women wear the Hindu robe and bodice, and neither appear in public nor add to the family income. Under native rule firework-makers were in great demand and highly respected and were sometimes rewarded by the grant of lands. During the last sixty years the demand for fireworks has greatly declined. Many have become soldiers and constables, and others farmers and petty hardware dealers. A few continue to make the fireworks which are in demand at Hindu and Musalman marriages and other festivals. They are hardworking, thrifty, and sober, but as a class are badly off. They marry either among themselves or with any of the regular Musalman communities. In religion, they are Sunnis of the Hanafi school, and a few of them are said to be religious and careful to say their prayers. They have no special class organization, and obey the regular Kazi who is both their marriage registrar and settler of social disputes. They seldom send their boys to school and none of them has risen to any high post.

KAFSHGARS.

Kafshgars, or Shoe-makers, are found in small numbers only in the town of Poona. They are descended from strangers from Kabul who are said to have come to the Deccan during Musalman rule. Their names Kishwar Khan, Dost Muhammad Khan, and Dilawar Khan, point to foreign extraction, and, though intermarriage has made great changes, both men and women are still bigger in bone, fairer, and larger-eyed than most Poona Musalmans. The men shave the head, wear the beard full, and dress in a headscarf, a shirt, a waistcoat, and a pair of tight or loose trousers. The women wear either a petticoat, a headscarf, and a bodice, or the Hindu robe and bodice. They appear in public, and help the men in embroidering slippers. The only shoes which the Kafshgars prepare are the embroidered slippers of coloured broadcloth, which are worn by married Musalman women, and sometimes by young men. A pair of women's slippers cost 4s. to £1 (Its. 2 - 10), and a pair of men's slippers 6s. to 10s. (Rs. 3-6). They are hardworking, but fond of good living, and spend all they earn without a thought of the future. Most have left Poona and gone to Bombay, Haidarabad, and other places in search of work. They marry either among themselves, or take wives from any of the regular Musalman communities. They have a special class organization, leaving the settlement of social disputes to a headman who is generally the oldest and richest member of their community. The

headman punishes misconduct by a fine which goes to meet the oil expenses of the mosque, They have no special Hindu customs, and are careful to hold the sacrifice or *akika* and the initiation or *bismilla* ceremonies. They are Sunnis of the Hanafi school, but few of them are religious or careful to say their prayers, They do not send their boys to school, and none have risen to any high post.

KALAIGARS.

Kala'igars, or Tinsmiths, found in large numbers both in towns and in villages, are local converts, who are said to have been turned to Islam by Aurangzib. They rank as Shaikhs and speak Hindustani among themselves and Marathi with others. They are tall or of middle-height, and dark or olive-skinned. The men shave the head, and wear the beard either long or short, and dress in a turban or a headscarf, a shirt, a waistcoat, and a pair of tight trousers. They put on an overcoat on going out. The women are generally delicate, fair, and wellfeatured. They dress in the Marathi robe and bodice, do not appear in public, and do not help their husbands except by house work. Both men and women are neat and clean in their habits. They are tinsmiths by craft, hardworking, thrifty, and sober and as their work is steady, they are well-to-do and able to save. They marry either among themselves or with any of the regular Musalman communities. They have a well organized caste body with a headman called *patil* who is chosen from among the richest and most respected of the community, and has power to fine any one who breaks their class rules. Any one who joins their class has to present the community with 10s. to £1 (Rs. 5-10) which is spent in a dinner. They are Sunnis of the Hanafi school. The older members are said to be religious and careful to say their prayers. They do not send their boys to school, and as their craft is thriving they take to no new pursuits.

MANYARS.

Manya'rs, or Bracelet-makers, are found in small numbers in most towns and large villages. They are of mixed Hindu origin dating according to their own account from the time of Aurangzib. They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, thin, and dark or olive-skinned, They shave the head, wear the beard full, and dress either in a large white or red Maratha turban or a headscarf, a shirt, a waistcoat, and a pair of tight trousers or a waistcloth. The women are's generally delicate with regular features and fair skins. They wear the Marathi robe and bodice, and most of them appear in public and help the men in their work.

Glass bracelet-making formerly paid well but the competition of English and Chinese bracelets has so lowered their profits that many have taken to retail English hardware in addition to or instead of selling bracelets. Some have shops, but most hawk their goods in streets where the higher class of Musalmans live whose women will not go to a shop to be fitted with bangles. They are hardworking, thrifty, and sober, and as a class are well-to-do people, living on their earnings and borrowing to meet emergencies. They have no special class union and no peculiar customs. They marry among themselves or with any of the regular Musalman communities. They are Sunnis of the Hanafi school, and most of them are religious and careful to say their prayers. They teach their boy's Marathi but not English. Some have taken service and some are in the police.

RAFUGARS.

Rafugars, or Cloth Darners, are found in small numbers in the city of Poona. They are local converts of mixed Hindu origin and ascribe their conversion to Aurangzib. They take the title of Shaikh and are considered high-class people. They speak Hindustani among themselves, and Marathi with others. They are generally short, thin, and fair. The men shave the head and wear the beard full. Their dress is a headscarf or turban, a coat, a waistcoat, a shirt, and a pair of tight trousers. The women wear the Marathi robe and bodice. They do not appear in public, or add to the family income. Both men and women are clean and neat in their habits. When rich Cashmere shawls, silk robes, and embroidered turbans were worn neat darning was of great importance and the Rafugars were famous for the skill and delicacy of their darns. Now their calling is in little demand. Most have left Poona for Bombay and other places where they have taken service as servants and messengers. They are hardworking and sober, but most of them are poor living from hand to mouth. They have no special class organization, nor any headman except the regular Kazi who acts both as marriage registrar and as judge in settling social disputes. They are Sunnis of the Hanafi school, and are said to be religions and careful to say their prayers. On the whole, they are a falling class both in numbers and in condition.

RANGREZES.

Rangrezes, or Dyers, are found in simall numbersin Poona and some of the larger towns. They are of two divisions, descendants of local Hindus of the same name, converted by Aurangzib, and immigrants front Marwar since the beginning of British power. The local dyers

speak Hindustani among themselves and Marathi with others; the Marwari immigrants speak Hindustani with a mixture of Marwari words with a Marwari accent. The men of both divisions shave the head and wear beards, but differ in appearance, the Marwaris being taller and stronger built and a little fairer than the local dvers. The women of both classes are delicate and fair. The Marwari women wear a petticoat, a headscarf, and a backless bodice; and the local dyers wear the Marathi robe and bodice. They help the men in their work and appear in public. As a class, the dyers are hardworking, thrifty, and sober, and are generally well-to-do and able to save. They dye turbans, headscarves, and silk and cotton thread charging 1s. to 2s. (Re. ½-1) for a turban, 6d. to 1s. (4-8 as.) for a headscarf, and about 4s. (Rs. 2) for forty pounds weight of silk. They dye red, orange, blue, green, and other shades. Their work is constant. Before Musalman and Hindu festivals and during the marriage season they are so busy that they employ people to help them in drying the clothes paying them 6d. (4 as.) a day. They are Sunnis of the Hanafi school, and some of them are religious and careful to say their prayers. They have no special class organization, nor any headman except the Kazi who acts as marriage registrar and settles social disputes. They do not differ in manners and customs from other regular Musalmans and marry with them. They do not send their boys to school nor take to new pursuits. On the whole they are a rising class.

MAHAWATS.

Mahawats, or Elephant-drivers, are found in small numbers in the city of Poona. They are local converts of the Hindu class of the same name. They style themselves Shaikhs and speak Hindustani at home and Marathi with others. They are tall or of middle height and dark. The men shave the head and wear the beard full, and dress in a turban, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women wear the Marathi robe and bodice. They appear in public, but add nothing to the family income. Both men and women are neat and clean in their habits. They are hardworking, thrifty, and sober. Under the British Government the demand for their services has fallen. They have taken to new pursuits, some serving as constables and others as servants and messengers. They live from hand to mouth and have to borrow to meet emergencies. Most of the men and almost all of the women eschew beef, and have a leaning to Hindu customs, inclining to keep Hindu festivals and believing in Hindu gods. They have no special class organization and no headman, and marry with any of the regular classes of Musalmans. In religion they are Sunnis of the Hanafi school, but few are religious or careful to say their prayers. They respect and

obey the regular Kazi, and employ him to register their marriages and settle social disputes. They do not send their boys to school, and none have risen to any high position.

SIKALGARS.

Sikalgars, or Armourers, are found in small numbers in the city of Poona and in some of the larger towns. They are the descendants of mixed low class Hindus who are said to have been converted by Aurangzib. They speak Hindustani at home and Marathi with' others. They are tall or of middle height and dark. The men shave the head, wear fall beards, and dress in a turban, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women wear the Marathi robe and bodice, appear in public, and help the men in their work. Both men and women are dirty and untidy in their habits. Armourers or knife-grinders are hardworking and sober, but do not earn more than 6d. to 9d. (4-6 as.) a day. They formerly sharpened swords, daggers, and other weapons; at present their work is confined to grinding knives and scissors for which they are paid about a halfpenny a pair. They grind knives on a wheel of kurand stone turned by a leather strap which their women and children work. They have no special class organization and no headman, and marry with any low class Musalmans. They have no special Hindu customs but are not strict Musalmans, as they perform neither the initiation nor the sacrifice. They are Sunnis of the Hanafi school but are not religious or careful to say their prayers, They obey the Kazi and employ him to register their marriages. They do not send their boys to school and take to no new pursuits.

PATVEGARS.

Patvegars, or Silk Tassel-twisters, are foundin small numbers both in the city of Poona and in other large towns. They are descended from local Hindus of the same name, and ascribe their conversion to Aurangzib. They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, thin, and dark or olive-skinned. They either let the hair grow or shave the head, wear the beard full, and dress in a headscarf or a turban, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women are generally delicate, olive-coloured, and regular featured; they wear the Maratha robe and bodice, and appear in public, but do not add to the family income. Both men and women are neat and clean in their habits. They twist silk tassels. They are hardworking, thrifty, and sober, and though not rich are not scrimped for food. They sell silk tassels and *kargotas*

that is the silk cords worth $1\frac{1}{2}d$. ($\frac{1}{2}a$.) which Hindus and a few Musalmans pass the loincloth through. They also sell false hair at 3d. to 1s. (2-8 as.) the packet, fly-flappers or chavris at 1 s. to 2s. (Re. $\frac{1}{2}a$ -1), and deck with silk women's gold necklaces and other ornaments for which they are paid 6d. to 1s. (4-8 as.) They earn 3d. to 1s. (4-8 as.) a day, but their work is not constant. They have no special class organization and no headman, and in manners and customs do not differ from regular Musalmans. They marry either among themselves or with any low-class Musalmans. They are Sunnis of the Hanafi school, and are seldom religious or careful to say their prayers. They do not send their boys to school, and some have sought employment as servants and messengers.

SEPARATE COMMUNITIES.

Fifteen Separate Communities marry among themselves only, and have customs which differ from the customs of regular Musalmans. Six, Bohords and Mehmans traders, Bagbans fruiterers, Tambolis betel-sellers, Bakarkasabs mutton butchers, and Gaokasabs beef butchers, are traders and shopkeepers; five, Gaundis bricklayers, Momins weavers, Pinjaras cotton-cleaners, Saltankars tanners, and Takaras stone-masons are craftsmen; and four, Bhatyaras cooks, Dhobis washermen, Pakhalis water-carriers, and Halalkhors sweepers, are servants.

BOHORAS.

Bohora's, probably from the Gujarati *vohoravu* to trade also known as Daudis from a pontiff of that name, are found in large numbers in the cantonment of Poona. They are immigrants from Gujarat. They are believed to be partly descendants of refugees from Persia and Arabia who settled in Gujarat about 1087 on account of a religious dispute and partly of Hindu converts of the Brahman and Vania castes. [Upon the death of Jafar Sadik, according to the Shias the sixth Imam, a dispute arose whether Ismail the son of Jafer's elder son or Musi Kazim Jafer's second son should succeed. The majority who supported Musi form the orthodox community of Shias who, from the number of their Imams, the last of whom is still to come, are known as Isna asharis or the Twelvers. The supporters of Musi's nephew, who started as a distinct body under the name of Ismailis, especially in Egypt, rose to great power. They remained united until in 1094, on the death of Almustansirbillah the succession was disputed. Of the late Khalifas two sons Nazar the elder at first named for the succession, was afterwards, on account of his profligate habits, passed over in favour of his

younger brother Almustali. A party of the Ismailis, holding that an elder son could not thus be deprived of his right to succeed, declared for him, and were called Nazarians." The other party, called from the younger son Mustalians, prevailed, and established Mustali as successor to his father. The Nazarians are at this day represented in India by the Khojas and the Mustalians by the Bohoras, They have come to Poona as traders from Bombay since the establishment of British power. Their home tongue is Gujarati, and with others they speak Hindustani and Marathi. They are generally active and well made, but are wanting in strength and robustness. Their features are regular and clear, the colour olive, and the expression gentle and shrewd. They shave the head, and wear long thin beards with the hair on the upper lip cut close. The men's dress consists of a white ovalshaped turban, a long white coat falling to the knee, a waistcoat, a long shirt, and a pair of loose trousers. Their women are generally delicate, fair-skinned, and regular-featured. Their dress is a red or a dark blue cotton or silk scarf called odna, a backless bodice called angia or kanchli, and a cotton or silk petticoat. On going out they shroud themselves in a large striped cotton or silk robe which covers the whole body except a small gauze opening for the eyes. They keep their eyelids pencilled with collyrium, their teeth blackened with antimony, and the palms of their hands and the soles of their feet reddened with henna. Except that they are good and thrifty housewives they add nothing to the family income. Both men and women are neat and clean in their habits. Daudi Bohoras are hardworking, thrifty, and sober, and are generally well-to-do, and spend much on marriages and other ceremonies. They are considered honourable traders and have a high name for honest dealing. They deal in English piecegoods, China and English hardware, and some of the poor make tin lanterns and tinpots, and iron oil and water buckets. The rich earn £200 to £500 (Rs. 2000-5000) a year, the middle-class £50 to £80 (Rs. 500-800), and even the poorest £20 to £30 (Rs. 200-300). They have a well organized body, and a strong class feeling. The head of their sect, who is knows as the Mullah Saheb, has his headquarters at Surat. He has many deputies or dais who are sent from Surat to the different Bohora settlements. They perform marriage and other ceremonies, settle minor social disputes, and refer difficult cases for the decision-of the head Mullah at Surat. The decision of the head Mullah is treated with great awe, and breaches of rules are occasionally punished by heavy fines. They marry among themselves only, and though they do not associate with other Musalmans, there is no great difference in their customs and observances. In religion they are Shias of the Mustalian branch and differ from Sunni Musalmans in rejecting three out of the four Imams and believing only in Ali the

fourth Imam, the son-in law-of the Prophet. They teach their children Gujarati only, and follow no pursuit except trade.

MEHMANS.

Mehmans, properly Momins or Believers, are found in considerable numbers in Poona cantonment. They are said to have come to Poona as traders about sixty years ago from Bombay. They belong to Cutch and Kathiawar where about the year A.D. 1422 their forefathers were converted by the celebrated Arab saint Yusuf Ud-din chiefly from Lohana Hindus. They speak Cutchi at home and Hindustani with others. The men are well-built, robust, and generally fair. They shave the head, wear the beard full, and dress in a silk or embroidered headscarf, a long overcoat, a waistcoat, a long shirt, and a pair of loose trousers rather tight at the ankles. The women like the men are tall, well-made, and fair with regular features. They dress in a long shirt or aba, a headscarf or odna, and a pair of trousers rather tight at the ankles, all of silk. Both men and women are neat and clean in habits. Mehmans are honourable traders and are hardworking, thrifty, and prosperous. They deal in English piecegoods, furniture, and other European articles. They have a good name among their fellow traders and most of them have agents and partner in Bombay through whom they get their supplies from England and other foreign countries. They marry only among themselves or get wives from Bombay and Cutch. Their manners and customs do not differ from those of regular Musalmans. They are Sunnis of the Hanafi school, and are very religious and careful to say their prayers. They teach their boys Gujarati only. They follow no pursuit but trade, and on the whole are a rising class.

BAGBANS.

Ba'gba'ns, or Fruiterers, are found in large numbers in almost all large towns and villages. They are descended from local Kunbis, and ascribe their conversion to Aurangzib. They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, well-made, and dark. They shave the head, wear the beard either short or full, and dress in a large Hindu turban, a tight-fitting jacket, and a waistcloth. The women, who have the same cast of face as the men, wear the Marathi robe and bodice, appear in public, and help the men in their work. They bear no good name for modesty. Both men and women are neat and clean in their habits. They keep shops in which they sell fruit and vegetables. Of fruit they sell local pomegranates, oranges, figs, watermelons, plantains, guavas, and

pomeloes. Of vegetables they sell all sorts of greens, potatoes, peas, French beans, and green spices. They buy their stock from village farmers and bring their purchases home on their bullocks. They are hardworking, thrifty, and sober, and most of them are well-to-do and able to save. They marry only among themselves, and have a well organized union under a *chaudhari* or headman chosen from the oldest and richest members. He has power to fine any one who breaks the caste rules. They differ from the ordinary Musalmans in eschewing beef, keeping Hindu festivals, and offering vows to Hindu gods. They respect and obey the Kazi whom they employ to register their marriages and sometimes to settle their social disputes. They do not send their boys to school and take to no other pursuits except selling fruit and vegetables. On the whole are a rising class.

TAMBOLIS

Ta'mbolis,. or Betel-leaf sellers, are found in large numbers in almost all large towns and villages. They are descended from local Kunbis and ascribe their conversion to Aurangzib. They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, well-made, and dark or olive skinned. They shave the head, wear the beard full, and dress in a large white Kunbi turban, a long tight jacket, a shirt, and a pair of tight trousers or a waistcloth. Like the men the women are either tall or of middle height, thin, and oliveskinned, with regular features. They dress in the Marathi robe and bodice, appear in public, and help the men in selling betel leaf. Both men and women are neat and clean in their habits. They are betel leaf sellers by trade, and are hardworking, thrifty, and sober, and generally well-to-do, and able to save. They have fixed shops in which they sell betel leaves, betelnuts, and some in addition sell tobacco. They marry only among themselves and have a separate union, but have no headman or any special rites or customs except that the women keep many Hindu practises and festivals. They obey the regular Kazi and employ him to register their marriages and to settle their social disputes. They do not send their boys to school, and take to no new pursuits.

BAKARKASABS.

Bakarkasa'bs or Mutton-Butchers also known as Lad Sultanis, numbers throughout the district. They are descended from local Hindu mutton-butchers and ascribe their conversion to Haidar Ali of Maisur (1763 -1782). The men are tall or of middle height, dark or olive skinned. They shave the head, wear the beard short or shave it, and

dress in a large Kunbi turban, a tight jacket, and a waistcloth. Some wear a largo gold ring in the right ear. The women are generally thin and tall, well-featured, and fair-skinned. They dress in the Maratha robe and bodice, and, though they appear in public, none except the old who sell the smaller pieces of mutton help the men in their work. Mutton-butchers are hardworking, thrifty, and sober, and some are rich, and spend much on marriage and other ceremonies. They marry only among themselves and have a separate and well organized class union under a headman styled chaudhari who holds caste meetings, settles social disputes, and fines any one who breaks caste rules. They have no connection with other Musalmans and eschew beef. They hold aloof from beef-butchers and deem their touch impure. They offer vows to Brahmanic and local gods and keep the usual Brahmanic festivals. Their only specially Musalman rite is circumcision. Though in name Sunnis of the Hanafi school few are religious, and they almost never go to mosques except on the Ramzan holidays. They do not send their boys to school and take to no new pursuits.

GAOKASABS.

Ga'okasa'bs, or Beef-butchers, found in small numbers in the Poona Cantonment, claim descent from Abyssinian slaves whom Haidar Ali made beef-butchers. They are said to have come from Maisur with General Wellesley's army in 1803. They speak Hindustani at home and Marathi with others. The men are tall or of middle-height, muscular, and dark. Some shave the head, others wear the head hair, and all have full beards, and dress in a headscarf or a turban, a shirt, a waistcoat, and a pair of tight trousers. The women are either tall or of middle height and dark. They wear the Maratha robe and bodice, appear in public, and help the men in selling the smaller pieces of beef. They are proverbially quarrelsome and shameless. Both men and women are dirty and untidy. Though hardworking beef-butchers waste most of their earnings on good living and liquor. Few of them are rich, and most are in debt. They kill cows and buffaloes selling the cow beef to Europeans and Musalmans and the buffalo beef to Musalmans and lower class Hindus such as Mhars and sweepers. They have shops and when their stock is not sold in the shops, they go about the Musalman and sweeper streets hawking what is left. They have a well managed union under a headman or chaudhari chosen from the rich who holds caste meetings and fines any one who breaks the rules. They marry only among themselves, and are considered lowclass Musalmans. In religion they are Sunnis of the Hanafi school, but few are religious or careful to say their prayers; they almost never attend the mosque. Their rites and observances do not differ from those of ordinary

Musalmans. They respect the regular Kazi whom they employ to register their marriages and to settle social disputes. They do not send their boys to school nor take to new callings.

GAUNDIS.

GaundiS, or Bricklayers, are found in considerable numbers throughout the district. They are descended from local Hindus of the same class and ascribe their conversion to Aurangzib. They speak Hindustani at home and Marathi with others. The men are tall or of middle height, thin, and dark. They shave the head, wear the beard full, and dress in a large Maratha-Kunbi turban, a tight jacket, and a waistcloth. The women, who have the same cast of face as the men, wear the Maratha robe and bodice, and appear in public, but add nothing to the family income. Both men and women are neat and clean. They are bricklayers by craft. They are hardworking and thrifty, but as their work is not constant, they live from hand to mouth, and have to borrow to meet emergencies. They have a separate union, but no special organization and no headman. They marry among themselves only, and differ from regular Musalmans in eschewing beef and keeping Hindu festivals. They are Sunnis of the Hanafi school, but few are religious or careful to say their prayers. They respect and obey the Kazi, and employ him to register their marriages and to settle social disputes. They do not send their boys to school. Most are bricklayers, but some earn their living as constables, messengers, and servants.

MOMINS.

Momins, that is Believers, are weavers who are found in considerable numbers over the whole district. They are descended from Hindus of the Kosti and Sali castes, and are said to have been converted by the saint Khwaja Syad Hussain Gaisudaraz of Gulbarga about the year 1398 (800 H.). They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, thin, and dark. They shave the head, wear the beard full, and dress in a large Maratha-Kunbi turban, a shirt, an overcoat, and a pair of tight trousers or a waistcloth. The women are tall or of middle height, thin, well featured, and olive-skinned. They wear the Maratha robe and bodice, appear in public, and help the men in all parts of their work including weaving. They add to the family income as much as a man. Neither men nor women are clean or tidy. They are weavers by craft and are hardworking and thrifty, but the competition of English and Bombay goods presses them hard. The rich employ the poor to weave for them

and pay them 2s. to 4s. (Rs. 1-2) for a robe of silk or cotton, which they make ready in four days, for a turban if of cotton 2s. (Re. 1) and if of silk 3s. (Rs. $1\frac{1}{2}$) woven in *four* days, for a striped cotton cloth 3d. to 6d. (2-4 as.), and for a waistcloth 1s. to 1s. 6d. (8-12 as.). They weave in hand looms using English or Bombay yarn. They weave cotton or silk turbans worth 6s. to £2 (Rs. 3-20), waistcloths with silk borders worth 6s. to £1 (Rs. 3-10), cotton robes worth 5s. to 8s. (Rs. 2½-4), cotton-silk robes worth 10s. to £2 (Rs.5-20), and striped cotton and silk for bodices worth 1s. to 6s. (Rs.½-3) the yard. These goods are sold either to wholesale dealers, who send them to Bombay and Surat, or to retail dealers in the market. They are extremely hardworking, weaving twelve to fifteen hours a day, working at night by lamp-light. They marry only among themselves, and as the women are as hardworking as the men, some of them have two or even three wives. They have a well managed union under a headman or patel chosen from the richest members, who, with the consent of the majority of the male members, fines any one who breaks their caste rules. Their manners and customs differ little from those of other Musalmans. In religion they are Sunnis of the Hanafi school, and most of the old men are said to be religious and careful to say their prayers. Their spiritual head is the representative of Khwaja Syad Hussain, the saint who converted them. He visits them yearly or once every second or third year, when they give him presents of cash and cloth. The spiritual guide, on making a new disciple, teaches him the creed and gives advice about conduct. Besides the religious and moral teaching the guide gives each of the disciples a list of his forefathers back to saint Khwaja. The disciple treats this list with the highest respect. He keeps it and values it as dearly as his life, and sometimes has it buried with him in the belief that the holy names will satisfy the angels and prevent them from torturing him in the grave. The Musalman belief is, that after the body is buried it is brought to life and two angels, Munkir and Nakir, visit and question the dead. They ask who is his Creator and his Prophet, and what is his religion. If the dead answers that his God is the same as theirs, his Prophet is the Prophet Muhammad, and his religion is the religion of Abraham whom God saved from fire, the angels retire, and, by God's will, the grave is made a paradise in which the believer remains till the judgment day. Sinners who fail to give satisfactory answers are tortured by the angels with hell fire which ceaselessly burns them till the judgment day. Some of them practise Hindu customs by keeping the usual Brahmanic and local festivals and offering vows to Brahmanic and local gods. Some have of late begun to teach their children Marathi and English. Besides as weavers some earn their living as constables, messengers, and servants.

PINJARAS.

Pinja'ra's, or Cotton-cleaners, are found in small numbers in some of the larger towns. They are said to be descended from local Hindus of the same class and trace their conversion to Aurangzib. The men are either tall or of middle height, thin, and dark. They shave the head, wear the beard full, and dress in a Kunbi turban, a tight jacket, and a waistcloth. The women have the same cast of face as the men. They wear the Maratha robe and bodice and appear in public, but do not help the men in their work. Both men and women are dirty and untidy. Though hardworking and thrifty, the cotton cleaners are much scrimped for food and have been reduced to poverty by the ruin of local hand-spinning caused by the cheapness of English, Bombay, and Sholapur machine-spun yarn. Their sole occupation now is teasing cotton for mattresses and pillows. They walk the streets from morning to evening twanging the string of their harp-like cotton teaser some times earning 6d. to 1s. (4-8 as.) and sometimes going home without a farthing. Many have left their craft and found employment as constables, messengers, and servants. They marry among themselves, but have no class union and no headman. Their manners and customs differ little from those of other Musalmans. They obey and respect the Kazi, and employ him to register their marriages and settle their disputes. They do not Bend their boys to school, and are falling in numbers and condition.

SALTANKARS

Salta'nkars, or Tanners, who are found in small numbers in Poona and in some of the larger towns, are said to be descended from local Hindus of the Chambhar or Mochi caste, and trace their conversion to Aurangzib. Among themselves they speak Hindustani and with others Marathi. The men are middle-sized, well-made, and dark. They shave the head, wear either short beards or shaven cheeks and chin, and dress in a large white or red Maratha-Kunbi turban, a tight jacket, and a waistcloth. Their women who have the same cast of face as the men wear the Maratha robe and bodice, appear in public, and add to the family income by helping the men in their work. Both men and women are dirty and untidy. The Saltankars or tanners are hardworking and thrifty, and some of them are well-to-do and able to save. Their proper calling is to buy goats' skins from the butchers and dye them. Of late years rich hide and skin merchants, Mehmans from Bombay and Labhes from Bombay and Madras, by agents spread all over the country, buy and carry to Bombay the bulk of the local outturn of skins. This rivalry has ruined the Saltankars' calling, and most have

given up their former trade. They have taken to making the coarse felt-like woollen pads called *namdas* which are used as saddle-pads and to pack ice. They also prepare the red dye called *pothi* which is used for colouring sweetmeats and food. They form a separate body and have a well managed union under a headman chosen from the richest and oldest members and empowered to fine any one who breaks their rules. They marry among themselves only, and differ from the regular Musalmans in eschowing beef, offering vows to Brahmanic and local deities chiefly Satvai and Marai, and keeping Brabmanical and local festivals. They respect and obey the Kazi but their only purely Musalman custom is circumcision. They do not send their boys to school. They have shown energy in taking to a new and fairly paid industry and as a class are well-to-do.

TAKARAS.

Taka'ra's, or Stone-carvers and Quarrymen, are found in large numbers. They are said to be descended from local Hindus of the Dondhphoda or stone-breaking class, and ascribe their conversion to Aurangzib. They speak Hindustani among themselves and Marathi with others. The men are tall or middle-sized, well-made, and dark. They shave the head, wear the beard either short or full, and dress in a large Hindu turban, a tight jacket, and a waistcloth. The women, who are like the men in face, wear the Maratha robe and bodice, and appear in public, but add nothing to the family income. Both men and women are rather dirty and untidy in their habits. The Takaras or stone-masons are hardworking, thrifty, and sober. Of late years their services have not been in much demand. When employed as quarrymen their day's wages vary from 1s. 6d. to 2s. (Re.¾-1). Most of them are poor, living almost from hand to mouth. When their work as stone-quarrymen fails, they go about towns and villages roughening grindstones for which they are paid \(^1/2a.\) each. Many have left their craft and taken to new pursuits, some serving as messengers and servants, others as labourers and carriers, and many of them have left for Bombay and Kolhapur in search of work. They marry among themselves only, but have no special class union and no head. They honour and obey the Kazi who settles social disputes and registers marriages. Unlike the regular Musalmans they eschew beef, offer vows to the Hindu deities Satvai and Mariai, and keep Hindu festivals. Though Sunnis of the Hanafi school, they are seldom religious or careful to say their prayers. Circumcision is their only specially Musalman rite. They do not send their boys to school, and on the whole are falling in number and condition.

BHATYARAS.

Bhatya'ra's, or Cooks, are found in small numbers in Poona. They are said to be descended from mixed local Hindu classes and trace their conversion to Aurangzib. Their home speech is Hindustani. The men are tall or of middle size, thin, and dark. They shave the head, wear the beard either short or full, and dress in a dirty turban or headscarf, a tight jacket or a shirt, and a pair of tight trousers or a waistcloth. The women have the same cast of face as the men. They wear the Maratha robe and bodice, appear in public, and help the men in cooking. Both men and women are dirty and untidy. They are engaged by Musalmans to cook public dinners, and are paid 2s. to 4s. (Rs. 1-2) to cook for a hundred quests. They have also shops where they sell cooked food including bread, boiled rice, mutton curry, pulse, and vegetables. They have no fixed charges, but, according to their customers' wants, sell quantities worth 3d. to 6d. (2-4 as.). They are lazy and fond of liquor, and, though their earnings are good, are always poorly clad and often scrimped for food. They marry only among themselves, but have no special class organization and no headman. They are Sunnis of the Hanafi school but are seldom religious or careful to say their prayers. They do not send their boys to school. Some take service with Europeans as dressing servants and butlers.

DHOBIS.

Dhobis, or Washermen, are found in small numbers in Poona and in some of the larger towns. They are said to be descended from local Hindus of the same name and ascribe their conversion to Haidar Ali of Maisur. They speak Hindustani among themselves and Marathi with others. The men are generally middle-sized, thin, and dark. They shave the head, wear short beards, and dress in a headscarf, a tight jacket, and a waistcloth. The women are like the men in face. They wear the Maratha robe and bodice, appear in public, and add as much to the family income as the men. Both men and women are neat and clean. Washermen are hardworking, but are fond of drink and spend most of their earnings on liquor. They wash clothes generally for several families and are paid 4s. (Rs. 2) for a hundred pieces of unironed clothes and 8s. (Rs. 4) for a hundred pieces of ironed clothes. When employed by European families they earn £1 to £1 10s. (Rs. 10-15) a month from each family. They marry among themselves only and have a well managed union under a chaudhari or headman, chosen from the oldest and most respected families. Unlike regular Musalmans they eschew beef, offer vows to Brahmanic or local Hindu

deities, Varun the water-god and Satvai, and keep Brahmanic and local festivals. They are Sunnis of the Hanafi school, but are neither religious nor careful to say their prayers. They do not send their boys to school. Their work is constant and well paid, and they take to no new pursuits.

PAKHALIS.

Pakhalis, or Water-carriers, are found in considerable numbers in Poona and in other large towns. They are said to be descended from the local Hindu class of the same name, and trace their conversion to Haidar Ali of Maisur (1763-1782). They speak Hindustani among themselves and Marathi with others. The men are tall or of middle height, well-made, and dark. They shave the head, wear the beard full, and dress in a large Maratha-Kunbi turban, a tight jacket, and a waistcloth or a pair of tight trousers. The women are either tall or of middle size, thin, and dark or olive coloured. They wear the Hindu robe and bodice, appear in public, and except when old do not help the men in their work. Both men and women are rather dirty and untidy. Pakhalis or water-carriers are hardworking thrifty and sober, and some are well-to-do and able to save. They carry water in large leather bags containing about forty gallons on the backs of bullocks, and sometimes slung in smaller bags across the thigh. They supply water to Musalmans, Christians, and Parsis, and to a few low-class Hindus. They work for several families and earn 4s. to 10s. (Rs. 2 -5) a month from each family. Some who are employed by Europeans are engaged solely by one family on 16s. to £1 4s. (Rs. 8 -12) a month. They marry among themselves only, and have a well managed union under a headman or patil, who settles social disputes with the help of other members of the community. Unlike the regular Musalmans they eschew beef and keep all local and Brahmanic festivals. In name they are Sunnis of the Hanafi school but seldom attend mosques and except circumcision have no special Musalman observances. They do not send their boys to school and take to no new pursuits.

HALALKHORS.

Halalkhors, or Sweepers, literally eaters of lawful earnings, found in small numbers in Poona city and cantonment, are local converts. They trace their conversion to Haidar Ali of Maisur. They speak Hindustani among themselves and Marathi with others. The men are of middle height, thin, and dark. They either shave the head or wear long hair, and keep the beard short or full. They dress in a turban or a headscarf, a tight jacket, and a pair of tight trousers or a waistcloth.

Some men who can afford it wear a large gold ring in the right ear. Their women are like the men in face, appear in public, and add to the family income. Both men and women are dirty and untidy. They are sweepers and nights oil-men, and are hardworking, but spend most of their earnings on liquor. They are employed by Europeans on 8s. to 12s. (Rs. 4-6) a month, and some in the service of the Poona Municipality as scavengers earn £1 (Rs. 10) a month. They marry only among themselves and form a well managed union under a headman called *mehtar* who is chosen from the oldest members end has power to fine any one who breaks caste rules. The fines are spent on dinners and liquor. They are Musalmans in little more than name and are considered a very low class. Their ono Musalman observance is circumcision. They do not send their boys to school or take to new pureuits.

BENE-ISRAELS

History.

Bene-Israels that is Children of Israel, are also, though they dislike the name, known as Yahudis or Jews, and, because they press oil and keep Saturday as a day of rest, as Shanvar Telia or Saturday Oilmen. They are returned as numbering 597 and as found in Bhimthadi, Haveli, Maval, Poona, and Sirur. Besides in Bombay, where they have been settled for more than 150 [This is doubtful. According to Mr. Haeem Samuel they came to Bombay in 1775 Annual Report Anglo-Jewish Association 1875-76, p. 45. years, Bene-Israels are found in the Kolaba and Thana districts and in the Habsan or Janjira State between Kolaba and Ratnagiri. The origin of the Bene-Israels is doubtful. They have come to India either from Aden or from the Persian Gulf. If from Aden they are believed by some writers to be partly descended from Jews taken captive in Egypt by Darius Hystaspes (B.C. 521-485) and deported by him to Hejaz in Arabia. [Price's Arabia, 99.] In the first century before Christ one of the Tubbaa or Hemyarite dynasty of Aden kings, B.C. 100 - A.D. 525, was converted to Judaism and introduced the Hebrew faith into South Arabia. [De Sacy, Mem. de Litterature, xlviii. 735-753.] Under these kings the settlements of Jews in South Arabia were probably increased after the dispersion of the Jews of Palestine by Titus (A.D. 79 - 81) and Hadrian (A.D. 117-138), and the defeat of Zenobia by Aurelian (A.D. 270-275). [De Sacy, Mem. de Litterature, xlviii. 735-753.] The Jewish Hemyarite princes continued in power till early in the sixth century (525), Dhu-Nawas by his cruel treatment of the Christians of Nejran, provoked an invasion of the Ethiopian king Eles Baan, who

defeated Dhu-Nawas and fiercely persecuted his Jewish subjects. [Milman's History of the Jews, III. 77 - 79, 87 - 88; Wilson's Lands of the Bible, II 657-658.] Either at this time or about a hundred years later, when they were hardly used by the prophet Muhammad (A.D. 570 - 632), a body of Jews may have left Aden and sought safety in Western India. The Babylonian Jews were the descendants of the Jews who were carried from Palestine to Upper Mesopotamia by Pul in B.C. 770 and by Shalmanesar about fifty years later. They always remained a large and powerful body. In the third century after Christ, under their leader the Prince of the Captivity, and again in the fifth century (427) when the Talmud was compiled, they were in great power. In the begining of the sixth century the revolt of Rabbi Meir brought on them the wrath of Cavade the king of the Persians [Basnage's History] of the Jews, 535, 563-566. The city where the Prince of the Captivity lived was plundered and the Prince and the President of the Council hanged. For thirty year their doctors did not dare to appear in public.] and they continued to suffer severely, till, in 638, the Persian dynasty was over-thrown by the Arabs. [Basnage's Jews, 570.] At any time during the sixth century a body of Jews may have sailed from the Persian Gulf to India. It is hard to say from which of these countries the Bene-Israels have come, In favour of an Arabian origin there is said to be in their appearance some trace of Arab blood, they are said to use some Arab words, and there is the modern connection with Arab teachers. On the other hand, the close trading connection of the Persian Gulf and India in the sixth century and the fact that Jews bearing the surname of Bene-Israel are still found in Maskat, favour the descent of the Western Indian Bene-Israels from the Jews of Babylon. [Welsted's Arabia, 21.]

Though there is no certainty as to the date when they came to India, it seems probable that it was in the sixth century. Their own tradition, for they have no records of any kind, states that they came to India about fourteen hundred years ago from the north, and that they were wrecked off Navgaon a little to the north of Thal, at the southern entrance to the Bombay harbour, and only fourteen, seven men and seven women, were saved. Two mounds near Navgaon village are said to be the sepulchres where the shipwrecked bodies were buried. Of the history of the Bene-Israels in Kolaba nothing is known. They would seem to have lived quietly both under Hindu and Musalman rulers, like other immigrants almost certainly marrying with the women of the country, to a great extent losing the knowledge of their special history and religion, and adopting the beliefs and practices of the people around them. About two hundred years ago a Jewish priest, coming to Bombay from Arabia, heard of the Jews in the country close by, and

going among them won them back from many Hindu observances and taught them the chief tenets and practices of the Hebrew faith. He also introduced the knowledge of the Hebrew language. Since then the leaders of the Bene-Israel community have shown themselves anxious to revive the worship of their forefathers. Synagogues have been built and many Hebrew copies of the law introduced, and most of the leading Jewish observances and feasts attended to. This revival owes much to the establishment of British rule in India, to whom from their origin and history, from their skill and trustworthiness as craftsmen and clerks, and from their discipline and valour as soldiers, the Bene-Israels have always been the objects of special interest and goodwill. The Poona Bene-Israels say they came into the district as soldiers in British regiments but did not settle in Poona before 1856 They belong to two classes the white or *gore* and the black or *kale*. According to their story the white are the descendants of the original immigrants, and the black of converts, or of the women of the country. White and black Bene-Israels, though the same in religion and customs, neither eat drink nor marry together. [Among Cochin Jews the black Jews are descendants of local converts and slaves, Ind. Ant. I. 195. The black Cochin Jews are proselytes. They have grants which date as far back as the eighth century. Buruell in Ind. Ant. VIII. 333. The names in common use among men are Abraham, David, Moses, Solomon, and Samuel; and among women Leah, Mariam, Ribka, and Rahel. Formerly men were called Hasaji, Balaji, Eloji, and women Ladnbai, Esubai, Sakubai, but the present generation have given up the use of Hindu names.

Appearance.

The terms of respect for men are *Azam* and *Murhabi* and for women *Amasaheb* and *Baisaheb*. Their surnames are village names marking former settlements as Divekar, Navgaonkar, Thalkar, and Ziradkar, called after villages in the Kolaba district; and persons bearing the same surname can eat together and intermarry. The men are of about the same colour as Marathas, perhaps a little fairer. They are generally above the middle height and strongly made, and in many cases have an expression of much intelligence and of strong character. Their eyes are dark brown and their hair black, and, except two tufts one over each ear they shave the head. They wear the moustache and a short beard. The women are generally goodlooking and fair, some of them have a ruddy tinge in their cheeks, and have lively black eyes, straight noses, and thin lips. Like Hindus they wear the hair tied in a knot behind the head, and use false hair and deck their heads with flowers.

Their husbands treat them with respect and they have much to say in family matters.

Language.

Their home tongue is Marathi. Among the educated the Marathi is correct, but in most house holds the Marathi spoken by husbandmen and others is used. They have also two peculiarities, r takes the place of l, and several Arab words are in common use. They pray in Hebrew which a few read fluently but none understand. Husbands and wives do not address each other by name. The husband addresses the wife with the phrase ago that is, I say; and the wife speaks of her husband as the housemaster or gharkari, or if he is an officer in the army by his rank as subhedar, jamadar, or havaldar.

Houses.

They live in houses of the better sort, two or more storeys high, with walls of brick and tiled roofs. Their house goods include metal and earthen vessels, tables, chairs, boxes, cots, stools, glasses, glass globes, and picture frames. The only special article is, fixed to the upper part of the right door post, a box with a small square glass let into the front of it, and inside in a wooden or tin case, four or five inches long and an inch wide, with a hole in the upper part of it, a piece of parchment with carefully written verses from Deut. vi. 4-9 and xi. 13-20 so placed that from the outside through the holes in the case and box, the word Shadaya or Almighty can be read. Both in going out and in coming in, the members of the household touch this box with their two first right fingers and kiss it. They have men servants and women servants either Marathas or Musalmans. A Bene-Israel will drink from a vessel belonging to a Musalman or to a European and will eat from the hand of a Brahman or other high caste vegetarian. They do not eat with persons belonging to other communities, and hold that a Mhar's touch defiles. They eat rice, wheat, millet, pulse, vegetables, fruit, oil, butter, and salt, and, with certain restrictions, flesh fowl and fish. No carcasses are eaten, and among four-footed animals only such as chew the cud and divide the hoof. They so abhor swine's flesh that a pig-eater suvar-khau is their grossest term of abuse. Of birds, the rule is that those may be eaten which do not hold their prey in their feet, and of fish, only those with fins or scales are lawful. Neither fat nor blood may be eaten, nor may the hind quarters of an animal unless the sinews in the thigh are removed. No lame, blind, or blemished animal can be used as food, and even a clean animal is not lawful unless before its death its throat has been cut with certain

ceremonies, its blood spilt on the ground, and the inside examined, and its heart liver and lungs found to be sound and healthy. If any of these organs are diseased the animal is declared unfit for food. Before dressing it the flesh is washed, rubbed with salt, laid in a bamboo basket for about half an hour, and then squeezed till all the blood is pressed out of it. In dressing flesh, sweet oil not butter is used. The Bene-Israels drink water, milk, tea, and coffee. They drink liquor, both country and European, but only in the evening before supper, and they will not stir from the house after they have taken it. They may be called temperate drinkers, and such of them as know English, use European not country liquor. They have two meals a day, a morning meal between nine and ten and an evening meal between seven and nine. Men and women eat separately, the men first. Children sometimes eat with their fathers and sometimes with their mothers. Except on fast days, Their fast days are five: Som Gadalya, the Day of Atonement in September-October; Som Tebet or the Fast in memory of the siege of Jerusalem in December-January; Som Esther, the Fast of Esther, in March; Som Tammuj the taking the outer city in July; and *Tishabeab* the Destruction of Jerusalem, in August. Formerly the four chief fasts, Tebet, Esther, Tammuj, and Gadalya, were known as Sababi Roja or Fasts of Merit. when they neither eat drink nor smoke, well-to-do and middle class Bene-Israels have at every meal one or more dishes of fish, flesh, or fowl. Except on feast days, the poor seldom taste animal food, their chief article of diet being boiled pulse or ahuaris. Their feasts are: Rosh Hosana or New Year's Day in September, Sukoth or the feast of Tabernacles in September-October; Purim or the Esther feast in March; Pesa or Passover in March-April; Shabuoth, or feast of weeks in May-June; and Saturday, that is from 6 P.M. on Friday to 6 P.M. on Saturday, though not a feast day, is kept as a day of rest and rejoicing, when good clothes are worn and a specially good dinner prepared before sunset on Friday is eaten.] In April and May, before the rainy season sets in, all classes alike, rich middle and poor, lay in four or five months' store of grain, pulse, onions, firewood, spices, dried fish, pickles, wafer biscuits, oil, butter, and sugar. The ordinary monthly food expenses of a household of six persons, a man and wife, two children, and two relations or dependants, living well but not carelessly, would be for a rich family £3 to £4 (Rs. 30-40); for a middle class family £2 to £3 (Rs. 20-30), and for a poor family £1 10s. to £2 (Rs. 15-20). Among Bene-Israels the chief occasions for public feasts are in honour of the birth of a son, a circumcision, a marriage, or a death. The feasts are either morning entertainments between nine and twelve, or evening entertainments between seven and ten. The guests are both men and women, one or two from each house. They are sometimes relations only, in other

cases both relations and castefellows, but never any one who does not belong to the caste. In giving a feast a Bene-Israel with his wife's help, makes out a list of the quests who should be asked, has them asked by the servant of the synagogue or sammash, collects the supplies, borrows if necessary the caste cooking pots from the treasurer or gabai, and calls in friends and relations to help in the cooking. The beadle'or the servant goes from house to house and standing at the door calls the householder by name and gives him the invitation. All accept whether or not they mean to go.] When everything is ready large copper or China platters are filled with rice, and, over the rice, four or five rice cakes or *gharis* are laid. As the guests come they leave their shoes in the veranda, and are led by the host into a place in the house which is covered with carpets or mats supplied from the synagogue. Near the host a few places of special honour are reserved for the honourables or *mankaris* and the minister or *hajan* meaning prayer - reader of the synagogue. When the dinner is ready large rice platters are brought in by some of the guests who have been asked to help, and the guests gather round the platters in groups of four or five. The men dine first and the women after the men. When the guests are seated round the platters about a quarter of pound of mutton is handed to each guest in a banian leaf cup. When the feast is served, one of the elders lays two pots, one full of water the other empty, and three or four pieces of wheat bread and some salt before the minister. The minister pours water over his hands, lays the bread and salt on his open palms, and says in Hebrew either, Blessed art Thou O Lord, King of the Universe, who causest bread to be produced from the earth; or Blessed art Thou O Lord King of the Universe, the Creator of different kinds of food. The guests say Amen, and the preacher breaks the bread, and dips it in salt, and eats it. He then breaks more pieces of bread, dips them in salt, and hands them to the servers, who give one piece to each group of guests, each of whom takes and eats a piece, After mutton curry has been poured over the rice and cakes, and eating has gone on for some time, the host asks the elders if they think it safe to allow drinking. They think there is no danger and engage that the guests will neither exceed nor guarrel. A cup of wine is offered to the preacher, who blesses it saying, Blessed art Thou Lord, King of the Universe, by whose word everything came into existence. The people answer Amen. The minister drinks a cup and the rest is served to the other quests. When all have drunk the minister raising both his hands and the guests joining him repeat from the CXLV. Psalm; The eyes of all look towards Thee and Thou givest them all their bread. Thou openest Thine hands and satisfiest the wants of all men. At the end when every one has washed his hands, they say a long grace. The minister kisses a portion of bread and salt,

sends it round to the guests each of whom kisses the bread and tastes a little of salt, and leaves. The dishes are then taken into the inner part of the house where the women guests are seated, and a meal is served to them in the same way as to the men, except that there are no seniors and no preacher to bless the food. If children are brought to these feasts they eat either with their fathers or with their mothers. A feast for fifty guests costs £2 to £3 (Rs. 20-30).

Dress.

Bene-Israels are neat and tidy in their dress. Their dress is partly Musalman partly Hindu, a turban or cap, a Hindu coat, trousers or a waistcloth, and Hindu shoes. Indoors a rich man leaves his feet bare, wears a cap, a waistcoat, and a waistcloth. or trousers; and in cold weather a close woollen cap, a flannel waist-coat, and stockings. Out of doors he wears a cap, a turban white red or crimson according to taste, a cotton broadcloth or alpaca coat, a waistcoat with silver buttons, and a silk-bordered waistcloth or trousers. In his hand he carries a silk or cotton handkerchief, and wears either native shoes called apashai or sandals called vahans. His ceremonial dress is the same, except that it is generally white. As among Prabbus the young are taking to English-cut coats, pantaloons, and boots and shoes. Their ornaments are generally the same as those worn by middle and low class Hindus of the same rank. A rich man wears the gold earrings called amblas hanging from the lobes of his ears, a gold chain or kanthi, and gold finger rings, and carries a silver watch and chain hanging from his neck. A rich Bene-Israel's wardrobe is worth £7 to £10 (Rs.70-100). The dress of the middle class and poor Bene-Israels is the same, only that it is of cheaper and coarser materials. Out of doors he wears a waistcoat, a waistcloth or trousers, a cap, and sometimes a turban, the whole representing 10s. to £1 (Rs. 5-10).

Bene-Israel women dress like Kunbis in a full robe and loose bodice passing the skirt of the robe between the feet and tucking it into the waistband behind. They do not wear black robes. The indoor dress of a woman of a rich family is a robe or *lugde*, and a loose bodice or *choli* with sleeves and back, generally of country cloth. The indoor jewelry includes head, ear, neck, and arm ornaments; widows are not allowed to wear glass bangles or the marriage lucky necklace or *mangalsutra* and nosering. In addition to the above on going out of the house, except widows who are not allowed this indulgence, the Bene-Israel woman draws over her head a shawl or silk-bordered waistcloth or *dhotar*. Except that it is costlier, the ceremonial dress of a rich woman does not differ from that worn on ordinary occasions. Her wardrobe

represents £15 to £20 (Rs.150-200) and her ornaments £ 100 to £200 (Rs. 1000 - 2000). Except that her stock of clothes is smaller and that her ornaments are fewer and lighter, the indoor, outdoor, and ceremonial dress of a middle class Bene-Israel woman is the same as that of the rich. She would have from two to four changes of raiment worth altogether £7 to £10 (Rs. 70-100). The wife of a poor man borrows jewels for festive occasions, and her stock of clothes varies in value from £2 to £3 (Bs. 20-30). Up to four years of age, rich middle and poor children, both boys and girls, are dressed in a cotton cap called teltopi, covering the head and ears and tied under the chin, or a gold embroidered skullcap or golva, a short-sleeved frock, and a piece of cloth called balote, both rolled round the waist and tucked in front. Between four and seven, both boys and girls wear indoors a waistcoat, and out of doors a cap waistcoat and trousers. Between seven and ten, boys wear indoors a cap, a waistcoat, and either a waistband langoti, or trousers, and out of doors a cap, a coat, trousers, and native shoes. Girls, either at home or out of doors, wear a bodice or waistcoat and a petticoat. As it grows up a child's dress comes to cost as much as an adult's. For a boy the yearly expenditure in a rich family varies from about £5 to £10 (Its. 50-100) in a middle class family from about £2 to £4 (Rs. 20-40); and in a poor family from about £1 to £2 (Rs. 10 -20). For a girl in a rich family the expenditure varies from £4 to £7 (Rs. 40 - 70); in a middle class family from about £2 10s. to £3 10s. (Rs. 25-35); and in a poor family from 10s. to £1 (Rs. 5-10). A rich man's children have a full stock of ornaments; and few middle class or poor families are altogether without jewelry.

Condition.

Though somewhat quarrelsome and revengeful the Bene-Israels are a well-behaved and valuable class, hardworking, sober, loyal and well-to-do. They are pensioned soldiers and hospital assistants, clerks, carpenters, masons, stationers, and moneylenders. As writers in Government offices, they draw monthly salaries of £1 10s. to £20 (Rs. 15 - 200), as pensioners 8s. to £13 (Rs. 4 - 130 and as masons and carpenters 10s. to £4 (Rs. 5 - 40) a month. On the whole the Bene-Israels are well-to-do. They are rather fond of drinking and their costly ceremonies and feasts force them into debt. Still they are vigorous hardworking and prosperous. They have no professional beggars. All their destitute are relieved by private charity or from the Poona Benevolent Society's fund.

Religion.

The Bene-Israels worship one God and use no images. In their synagogues they have manuscript copies of the Old Testament and consider it of divine authority. [When worn out, their manuscripts are buried or sunk in deep water. Their loss is mourned as the death of a man.] They preach their religion only to people of their own tribe. The essence of their faith is given in the Hebrew sentence, The Lord our God He is one Lord. [Deuteronomy, vi, 4.] All through life this text is in the Bene-Israel's mouth When he repeats it, he touches the right eye with the right thumb the left eye with the little finger, and the forehead with the three middle fingers. Besides the belief in one God, the Bene-Israel confession of faith includes thirteen articles: That God is the Creator and Governor of the universe; that He was, is, and will be their only God; that He is without form and without change that He is the beginning and end of all things; that He alone should be worshipped; that the Old Testament is the only true Scriptures: that Moses excelled all the prophets, and that his laws should be obeyed; that the law in their possession is the same law as was given by God to Moses; that it will never change; that God knows all men and understands their works; that God will reward just and will punish the unjust; that the promised Messiah is to come; and that the dead will rise and glorify Him.

The Bene-Israels have two kinds of years, a civil year and a religious year. The civil year begins from the month of *Tishri* in September, from the first of which they date the creation of the world. [The Bene-Israel's era is the creation B. C. 3671. The religious year begins from Nissan which generally falls in March and is said to mark the date when the Israelites left Egypt. The names of the days or yome of the week are: Rishon or Sunday, Sheni or Monday, Shalishi or Tuesday, Rebiyi or Wednesday, Hamishi or Thursday, Shishi or Friday, and Shabiyi Shabbath or Saturday. They calculate by lunar months. There are twelve months in the year, each month with twenty-nine to thirty days. [The day of the new moon is called the first of the month. It is not observed by them unless it falls on a Sunday, when they keep it both in their houses and in the synagogue repeating prayers. From the fifth to the ninth of the month, when the moon is seen to increase, they read prayers standing on their toes and facing the moon.] Every third year an additional month called *Be-Adar* or the second *Adar* is added which always falls after the Adar month. The names of their months are: Tishri or September, Heshvan or October, Kislev or November, Tebet or December, Shebath or January, Adar or February, Nissan or March, Iyar or April, Sivan or May, Tammuj or June, Ab or July, and Elul or August. The following fasts and feasts are observed by the Bene-Israels: The first month *Tishri* falls in September and has

thirty days. On the first of this month the world was created. The feasts that fall in this month are: 1. Rosh Hosana, or the new year's day; 2. Som Gadalya, or the fast of the new year; 3. Kippur, or the atonement day; and 4. Sukoth, or the tabernacle feast. Rosh Hosana is known under four names: (1) the new year's day, (2) the day of remembrance, The name Day of remembrance is given that people may remember the prophets before God, be saved from sin, and admitted into heaven.] (3) the judgment day, [The name Judgment Day is given because on this day God judges the dead. The names of the righteous are written in the book of life, and of the unholy in the book of death. Those whose good and bad actions are equal are kept till the day of judgment in order to allow them time to repent and be enrolled in the book of life.] and (4) the trumpet-blowing day. [It is the Trumpet blowing Day because the trumpet is blown one hundred and one times in memory of the sheep offered instead of Isaac on mount Moriah.] The feast begins from sunset and lasts for the first two days of the month. A week or so before this day the whole house is whitewashed, now clothes are bought, and all are merry. Except that cooking is allowed the first two days are kept as sabbaths. At three in the morning, dressed in their best, they attend the synagogue. When service is over, the congregation divides into two parties facing each other, one standing and the other sitting. Those standing read the forgiveness prayers, asking to be forgiven their sins. Those sitting say, As we forgive you, so may you be forgiven from on High. Then those that were standing sit down, and those that were sitting stand, and in their turn ask and receive forgiveness. Then they kiss each other's hands and return home, where they kiss the hands of the women of the house, and sit down to a rich feast of apples, dates, pumpkins, honey, fish, and sheep's head. Early next morning they attend service and spend the day in the same manner as the day before. Som Gadalya, on the third of the month, is held in remembranco of Gadalya's murder, on the anniversary of which a month before the Bene-Israels begin morning prayers. This feast is commonly known as the New Year's Day feast or Navyacha Roja, when new rice mixed with milk and sugar is eaten. Tasting this dish is said to please ancestral souls which come and sit on the house tops. They hang ears of rice on their doors. The first ten days of the month are spent in repenting and confessing sin. The sabbath that follows this festival is called the Repentance Sabbath or *Teshuba Shabbath*. During these days the Bene-Israels attend service at three in the morning, repeating the forgiveness or *selihot* prayers. The prayers last for about two hours. When they are over they kiss each other's hands and go home and sit to a dinner of sweetmeats, mutton, [If they do not get the sheep's liver, which is an important part of the dish, they use in its stead a

fried eggl and liquor. They' offer a prayer over each plate, smell the sabja and put it aside, pour liquor on the ground to satisfy their ancestors, and make a hearty meal. In the afternoon they bathe in cold water or tebila, plunging in seven times and repeating prayers, or pouring water on their heads seven times with bathing pots, and being struck by the minister seven times across the back with a cord. When the bath is over and before lamplight, they finish their meals. Dressing in white clothes with the women and children in their richest robes, they go to the synagogue. This is beautifully lighted, and all the law books are taken out of the ark by the elders, and portions are read. The atonement fast or *Kippur* on the tenth day is kept strictly. A few families kill a cock. They spend the day and night in confession and prayer. They blow trumpets in their houses, and shutting themselves in their houses till the evening of the next day, From this the day is khown as the door-shutting or dar-phalayacha san. they do not talk to or even touch people of other castes. Formerly the Bene-Israels on the atonement day worshipped the moon, kissed their hands and bowed down to it, threw towards it a few grains of rice some sandalpaste or *gandh* and *sabja* leaves, and showed it a silver or gold coin which was then laid in a box. The house lamp was also worshipped. Now they pray for the Empress of India, the Governor of Bombay, and others in authority. On the eleventh day alms are given and friends and relations feasted. On the fifteenth day the feast of Sukoth is celebrated which lasts seven days. A booth is built near the synagogue and covered with branches of trees and adorned with flowers and fruit, and in it the feast of Palms is celebrated. On the eighth day called Simhat Tora all the law books are taken out of the ark and placed on the pulpit, the people dancing and jumping round it. This goes on seven times, each time with the repetition of Hebrew verses. This is observed as a feast of great rejoicing, men women and children dancing and singing Hebrew, Muhammadan, and Marathi songs. Wine is handed round, and all is merriment and joy. The second month Heshvan falls in Kartik or October- November and has thirty days, This month has neither a fast 'nor a feast. The third month Kislev falls in Margshirsh or November-December and has thirty days. On the twenty-fifth being the eighth day of the festival of *Hanuka* or temple cleansing, they light their houses, beginning with two lamps on the first night, three on the second, and so on till the eighth when they light nine lamps and repair to the synagogue, where also lamps are lighted, and there they pray both in the morning and evening. The fourth month *Tebet* falls in *Paush* or December - January and has twenty-nine days. A fast is held on the tenth of the month. The fifth month Shebath falls in Magh or January-Febuary and has thirty days. Blessings are invoked on the new leaves and vegetables are freely

eaten. The sixth month Adar falls in Phalgun or February -March and has twenty-nine days. On the thirteenth a fast is held and the fourteenth is a great feast day. All Bene-Israels go to the synagogue to hear the story of Lot or Megilla read. The seventh month Nissan falls in Chaitra or March-April and has thirty days. The festival of the Passover begins on the fourteenth. On the first two days the Bene-Israels use rice bread mixed with vegetables and during the next six days rice bread alone. On the first day they eat the right leg of a goat and while praying drink wine freely. The twenty-third of this month is called Jimbag, and is spent as a day of rejoicing. On the first and the last two days of the month prayers are repeated in the synagogues. On the thirtieth in every household all metal and glass pots are sunk in water. If this is not done they are thought unfit for use. The first born, whether male or female, fasts on this day. The eighth month *Iyar* falls in Vaishakh or April- May and has twenty-nine days. In this month falls the second Passover, observed by those only who could not keep the first. The ninth month Sivan falls in Jeshth or May-June and has thirty days. The feast begins on the sixth of the month. It is kept for two days in memory of God's gift of the law to Moses, the people remaining awake at the synagogue during the night praying. The tenth month *Tammuj* falls in *A'shadh or* June-July and has twenty-nine days. The seventeenth is kept as a fast in memory of the breaking of the tables of the law by Moses. The eleventh month Ab falls in Shravan or July-August and has thirty days. On the ninth the Bene-Israels fast on account of the destruction of their temple at Jerusalem. They eat only wet pulse or *valbirde*, do not wear the surplice, sit on the floor of the synagogue, cover the law boxes with black cloth, and hold it as a day of deep mourning. The twelfth month *Elul* falls in *Bhadrapad* or August-September and has twenty-nine days. The people fast and attend the synagogue for prayers before dawn.

Customs.

The chief rites are marriage, birth, circumcision, a girl's coming of age, and death. The marriage ceremonies are quite as important and complicated as among Hindus and have a special interest from the curious mixture of Hindu and Jewish customs.

Marriage.

When the boy's family fix to ask a certain girl in marriage, they send one of their nearest kinsmen and one of their nearest kinswomen to make, the offer. At the girl's house the kinsman sits outside with the men of the house and the kinswoman sits inside with the women of

the house. After general talk the messengers make an offer for the girl's hand. Her parents consult together and either accept or refuse, or, if there is some question as to the amount of dowry she should bring or the value of the ornaments she should receive, they put off their decision till the point is settled. A day or two after the two families have come to an agreement, the boy's father goes to the headman's or *mukadam's* house, tells him of the agreement, and asks him to call the girl's father to fix the settlement day or betavan. The girl's father comes, and the same evening is generally fixed for the settlement. Guests are called, many or few according to the parties' means, and about seven in the evening meet at the headman's house. The headman tells the elders or *mankaris* the object of the meeting, and one of the elders explains to the quests the marriage that is proposed, and charges them if they know of any objection to declare it. If no one raises an objection, the headman fixes dates for the marriage and other observances, so that all may fall between one Saturday evening and the next Friday noon. He tells the parents how many dinners they should give, and how much they should pay to the synagogue. [Generally if the boy's parents give the synagogue £3 10s. to £4 (Rs. 35 - 40) and the girl's parents £1 10s. to £2 (Rs. 15- 20) they need give no caste dinners. Then, at the boy's father's expense, liquor is brought in, and with some grains of parched gram or rice, is handed to the minister who blesses the cup and drinks it. The headman, his assistants or chaugulas, and the fathers drink next, and when the whole party have drunk, the minister asks a blessing, and the company, after eating betelnut and smoking tobacco, go to their homes.

Sugar-eating.

Two to eight days later comes the sugar-eating or sakarpuda. About seven in the morning male and female guests meet at the boy's. When the elders are seated the father places before them, covered with a handkerchief, a metal plate full of sugar or molasses with a gold or silver ring hid in it. The bridegroom richly dressed, with a boy on either side holding lighted candles and repeating Hebrew texts, [The texts are: A true law hath God given to His people by the hand of His prophet, who was faithful in his house. God will never alter nor change His law for any other. He beholdeth and knoweth all our secrets; for He vieweth the end of a thing at its beginning. He rewardeth the pious man according to his works and punisheth the wicked according to his wickedness. At the end of days will He send our Anointed, to redeem those who hope for the accomplishment of his salvation. God in His great mercy will revive the dead; blessed be His glorious name,

praised for ever more. These are the thirteen main articles of our faith. They are the foundations of the decree of God and His law.] is led to the door and set on a richly habited horse, and the party form into a procession with musicians playing in front of them and go to the girl's. At the girl's they are met and led into the house, where the girl richly dressed is seated on a chair or stool covered with white cloth. When the boy has been brought in and made to stand facing the girl the minister asks the girl's father and the elders if the guests may eat sugar. When the girl's father says they may, the minister, picking the ring out of the sugar, hands it to the boy, and asks the girl to give the boy her right hand. The boy thrice repeats the words, Behold thou art sanctified unto me by this ring according to the law of Moses and Israel, and gradually draws the ring on the first finger of the girl's right hand. Then, in accordance with the minister's instructions, the boy drops sugar into the girl's mouth, and sits facing her on a low wooden stool. She then drops sugar into his mouth and is led into the inner room where the women are. After some sugar and liquor the girl's father gives the guests a feast generally of rice and mutton and rice and sweetened cocoanut milk, they return to the boy's house, and after more sugar and betelnut go to their homes.

Rice-Washing.

About two days before the marriage, both at the bride's and bridgroom's houses, five bridesmaids or *karavalis* are called, and after being treated to molasses betelnut and tobacco, take baskets of rice to the well and wash it, amusing themselves by throwing the water at each other. In the evening they come back. Liquor and tobacco are served to them, and, singing Marathi songs, they smear the handmill with turmeric, tie mango leaves round it, and grind all the rice into flour. Meanwhile at both the houses other preparations go on. Supplies of rice, sugar, oil, molasses, spices, firewood, a sheep or two, liquor, clothes, and ornaments are laid in, and in some cases marriage booths are built. [The practice of building booths is dying out.]

Turmeric-Rubbing.

Early in the morning of the day before the wedding, the boy's parents, or some members of his family, go with music, to ask their friends to come to the turmeric-rubbing. The women guests come about one, the boy is seated on a cot in a front room, and seven married women or unmarried girls with much joking and romping rub him with turmeric. The boy who has now the brightness of God or *khudai nur*, upon him, may not leave the house, and is placed under the charge of two

unmarried men of his family who are constantly with him eating, drinking, and sleeping by his side. When the turmeric-rubbing is finished a few unmarried girls tie the marriage crown or shera to the boy's brow. [The marriage crown is made of beads of sandalwood powder or of paper. It is given to the boy by his relations. Sometimes a boy gets several of them, and they are interwoven by his father with silver chains or false pearls. The ancient Jews crowned the married couple. The husband's crown was of salt and sulphur to remind him, it is said, of Sodom and so incline him to cleave to his wife and avoid uncleanness. Basnage, 472. The original choice of salt and of sulphur there seems little doubt was because they were great spirit-scarers.] After tying the marriage crown the women take the rest of the turmeric to the bride's house, rub her with it, and bathe her. On their return the boy is bathed and given a meal. Betelnut and leaves are handed round and the guests retire. They come back about seven, serve cooked rice and milk, fetch henna, and, seating the boy on a cot, paste henna over his hands and feet and tie them in cloth. They then go to the girl's house, and after rubbing her hands and feet with henna, go back to the boy's, eat a more or less sumptuous meal, and go home.

Ancestral Dinner.

Next morning the boy's and girl's hands and feet are washed and friends called to the ancestral dinner or *nith*. The brido's family are specially invited, and with the elders and office-bearers of the caste, are seated on a white cloth in the marriage hall. A brass dish, filled with wheat cakes, pieces of rice bread, sugar, cocoa-kernel, cooked rice, goat's liver, hemp, *sabja* leaves, a glass of liquor, and a piece of bread with a little molasses, is set in the midst of the assembly on a folded white cloth. At the headman's request, the preacher, after praying in Hebrew for about a quarter of an hour, distributes the contents of the dish among the guests. A great dinner follows. After the dinner the girl's relations leave, and soon after invite the boy's family to their house where a second feast is given.

Shaving.

About two in the afternoon the boy is seated on a cot and his head is shaved by a barber, [This custom has lately been stopped.] While the shaving goes on, the boy's relations wave copper coins round his head and throw them to one side. After the boy's the heads of his father and of his two guardians are shaved, and the barber is paid 6d. to 2s. 6d. (Rs. $\frac{1}{4}$ - $\frac{1}{4}$) besides the coins waved about the boy. The boy his father

and the two guardians are rubbed with cocoa-milk and spices and bathed, and the boy is dressed in fresh clothes. At the girl's a woman bangle-hawker is called in, draws three or four green glass bangles round the girl's and some of the other women's wrists, and is given rice cocoanuts and 6d. to 2s. 6d. (Rs. $\frac{1}{4}$ - $\frac{1}{4}$) in money.

Present-Making.

About five in the evening men and women guests begin to drop in at the boy's house. As they come they are seated, the men in the marriage hall and the women in the house. In the house two plates are filled, one with a robe and bodice and ornaments either of gold or silver, five pounds of sugar, five almonds, five dates, and five betelnuts. In the other plate are five pounds of molasses, a cotton robe worth 10s. to £1 (Rs. 5 -10), a cotton bodice worth 4s. to 6s. (Rs.2-3), silver ornaments, and almonds and other articles as in the first plate. Both plates are covered with silk handkerchiefs brought into the marriage hall and set in the midst of the guests. Ten of the guests, some of them men and some of them women and one elder, taking the plates on men's shoulders go with music to the girl's house, and the men sit in the marriage hall with the plates before them, and the women inside with the women of the house. A low wooden stool spread with a white sheet is placed near the plates, and the girl is brought out by her father and seated on the stool, her father sitting behind her. The girl's relations are called to see the presents or baris, and when they come, about four or five of the boy's relations remove the handkerchief from the first plate. They examine the ornaments and the robe and the bodice, and if they are not satisfied with their value, quarrels arise that can be stopped only by the gift of more valuable presents. When this is arranged one of the boy's relations drops a little sugar into the girl's and her father's mouths, and the ornaments and clothes are presented to her. After the second plate has been presented in the same way the girl is taken into the house and dressed in her new clothes by the women of the family. The boy's relations return to his father's house, and after a light meal the boy is dressed in silk trousers, along robe or *jama* with a dagger or *khanjir* at the waist, a turban, a shoulder-cloth or *dupeta*, and shoes. During the five marriage days the bride and bridegroom are very Careful always to carry about the dagger. It is believed to keep off evil spirits.] In his hands he holds a tinsel-covered cocoanut, a silk handkerchief, and flower wreaths and gold ornaments encircle his neck, waist, arms, and fingers. On his brow is tied the marriage crown or shera, and long flower garlands cover him from head to foot. As he comes out of the house the guests stand up, and, repeating texts, lead him out side and

seat him on a richly decked horse. At starting they either break a hen's egg under the horse's right forefoot or dash a cocoanut on the ground in front of him, and forming a procession start for the synagogue. [It there is no synagogue the procession goes to the girl's house. Meanwhile the girl, richly dressed and covered with jewels with a shawl over her head, and with music and nine or ten women and one or two men, has been brought to the synagogue and seated on a chair facing the east covered with a white cloth. When he arrives the boy is led with the singing of songs into the synagogue and made to stand facing the girl, and the hems of their garments are tied together. Behind them on chairs, covered with a white cloth, sit their fathers and near kinsmen, their clothes also tied together. The rest of the male quests sit or stand in other parts of the synagogue and the women sit out side in the veranda. When all are in their places, the beadle asks the quests if they agree to the marriage and they answer they agree. The boy covers the girl with his flower garland and ties the marriage coronet or shera on her brow. The minister repeats Hebrew texts and the boy, standing in front of the girl, with a silver cup in his hand containing a silver ring and grape juice, looking towards the guests says, With your leave I perform the ceremony. The guests answer, With God's leave. The boy goes on: And with our elders's leave do I perform this ceremony. The guests again say, With God's leave. The boy exclaims, Praise be to the Lord for His goodness to us. The guests: And for His infinite mercy. The boy: May joy increase among the children of Israel. The guests: And may it spread in Jerusalem. The boy, May the holy temple be again built and may the prophets Ehjah and Moses come and gladden the hearts of the people of Israel. Blessed art Thou O Lord, King of the Universe, that created the fruit of the vine. Blessed art Thou 0 Lord, King of the Universe, who hath sanctified us with Thy commandments, who hast forbidden fornication, and restrained us from the betrothed, but hath permitted us those who are married to us by means of the canopy and wedlock. Blessed art thou Lord who sanctifieth Israel by means of the canopy of wedlock. Thou Rebecca the daughter of Mr. Awn Samuel art betrothed and married unto me Joseph David the son of Mr. David Benjamin by this cup and by this silver ring that is kept in the glass of wine and by all that is under my authority in the presence of these witnesses and masters according to the law of Moses and Israel. Praised be the Lord who created the fruit of the vine and suffered men and women to be joined in wedlock. Looking towards the girl and calling her by her name he says: You have been betrothed and married to me, by this cup whose wine you shall drink, by the silver in the cup, and by all that belongs to me I wed thee before these witnesses and priest, in accordance with the laws of Moses and of the Israelites. He then drinks ball the wine and says twice over: By this you are being wed to me, and then bending pours the rest of the wine, not leaving a single drop in the glass, into the girl's mouth. Then taking the ring he holds the girl's right hand, and pushing the ring over the tip of her first finger says: See you are married to me by this ring according to the law of Moses and the Israelites. After this has been thrice repeated, he takes a tumbler with some wine in it, and a necklace of gold and black beads, puts the necklace round the girl's neck, drinks some wine, and pouring the rest into her mouth, dashes the glass to pieces on the floor. Some say the breaking of the glass typifies the frailty of life and others that it is done to remind the people of the destruction of Jerusalem. The original reason probably was to prevent the glass falling into the hands of a magician. Then the priest reads the written covenant or ketuba. [In some places the reading of the marriage covenant forms the whole of the ceremony. The marriage covenant generally runs: This ceremony is being performed by people of good mark, in a good season, in a lucky hour, in the name of the Great Merciful One, whose name is exalted, who is worthy of the greatness, who is greater than all blessings and praise. May the communication between the bride and bridegroom and between the assembled congregation find favour with Him. And may the bridegroom be gladdened joyful and merry, may he receive final salvation, may he be kept from evil and may he be freed, and may his vows be fulfilled. ' May both the bride and the bridegroom be joyful and pleasant, be fruitful and multiply; may they live happily together and prosper. He who has gained a wife has gained what is best, and has received grace from God's house. Riches are handed down from one's father, a wise wife is a gift from God. May your wife be as the fruitful vine by the side of your house and your children round your table like the Jayitt. Behold the man who fears God receives such blessings. May God bless you from Sion that all the days of your life you may wish well for Jerusalem, and wish contentment among the people of Israel with your children's children. In this city of *Poona* on the river which flows into the great sea and in the year (name of the year), month (name of the month), and day (name of the day), according to our calculation of the creation, Benjamin Daud the handsome bachelor, the son of the honourable gentleman Mr. Aaron Daud asked the maid Rebecca, who is as the roe and a crown of beauty, the daughter of the honourable gentleman Mr. Abraham Solomon to be his wife according to the law of Moses and Israel. Saying, as among the people of Israel men supply their wives with food and rich clothes by working and living in love with them, I will by the help of God furnish you with food and clothes by working and living with you in love. And I give you two hundred juji which are equal to the twenty-five juji of pure silver, being the value

of your virginity. And I will give you food, clothes, and whatever is necessary for you, and will live with you according to the way of the world. As the virgin bride Rebcca has agreed to be his wife, and as the above mentioned bridegroom has taken from her in his own hands and has kept in his possession the dowry of the ornaments of silver and gold and of clothes of the value of £15 (Rs. 150) which she has brought from her father's house to the house of her husband, lie has kept the dowry with him as a debt and as goods like sheep and iron. This is the profit or loss that may arise from it. Besides this the bridegroom Benjamin Daud gives her, by his own will £13 (Rs. 130) more as consideration for the covenant. So the rupees of the dowry and the additional rupees together amount to £28 (Rs. 280). The above mentioned bridegroom Benjamin Daud said to us, The responsibility of this marriage covenant is on me and my children. I agree to it, and after me this must be paid from the best of my properties. The responsibility and the claim of this marriage deed is on the goods that I may have bought, and that I shall buy in future, and over that which has risk in it, and even on the cost on my back and that is also included in it. According to the custom and rule of the wise, whose memory is blessed, the responsibility of this marriage deed is as the responsibility of those marriage deeds of the daughters of Israel, that have been in practice from the times of old down to the present time. This is not merely as a certificate or a copy. All sorts of right in the world over it are void. In the questions of heritage all must be done according to the custom of the country.

At this point the reader of the covenant stops for a short time; the signatures of witnesses are taken. The minister says God commands that he who marries shall feed his wife well, clothe her, and perform the duty of marriage. The bridegroom says All these I will do. After the signatures are taken the reader goes on, And we the undersigned witnesses have in a right manner made the above mentioned bridegroom *Benjamin Daud* swear to what is written and said in this; and all this is fair, clear, true, and steadfast.

| Witnesses, at least two. | The signature of the |
|--------------------------|----------------------|
| bridegroom. | |
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| | |
| | |
| | |
| | |

The signature of the reader.

Before reading the last sentence he takes the fringes of the four corners of the boy's veil or sisith, and says thrice ever: God commands that he who marries shall feed his wife well, clothe her, and perform the duty of marriage. All these the boy promises to fulfill. Then the guests invoke a blessing, and the boy signs' the paper in the presence of two witnesses and the minister. The witnesses are chosen by the girl's father. They ask the boy whether he approves of them as witnesses. The minister reads the last sentence of the marriage covenant, signs it, and rolling it up hands it to the boy, who delivers it to the girl, saying Take this marriage covenant, henceforth all that belongs to me is yours. She takes it in her open hands, and makes it over to her father. The guests then sing a song in praise of God, with whose will the ceremony was performed, and in praise of the bride and bridegroom. The minister then takes a glass of wine and repeats the seven following blessings, Blessed art Thou O Lord our God, King of the Universe, who created the fruit of the vine. Blessed art Thou O Lord our God, King of the Universe, who hath created every thing for Thy glory. Blessed art Thou O Lord our God, King of the Universe, who hath formed man. Blessed art Thou O Lord our God, King of the Universe, who hath formed man in the likeness of Thy form, and prepared for him a like form of everlasting fabric. Blessed art Thou O Lord our God, who formeth man. She who was barren shall rejoice and delight at the gathering of her children unto her with joy. Blessed art Thou O Lord, who causeth him to rejoice with her children. Ye shall surely rejoice ye loving companions as your Creator caused your forefathers to rejoice in the garden of Eden. Blessed art Thou O Lord, who causeth the bridegroom and bride to rejoice. Blessed art Thou O Lord our God, King of the Universe, who hath created joy and gladness, bridegroom and bride, love and brotherhood, delight and pleasure, peace and friendship. Speedily, O Lord our God, let there be heard in the cities of Judah and in the streets of Jerusalem the voice of joy and the voice of gladness, the voice of the bridegroom and the voice of the bride, the voice of merriment of the bridegrooms at their marriage feasts and the music of youth. Blessed art Thou O Lord who causeth the bridegroom to rejoice with the bride and causeth them to prosper. The minister then repeats three texts. At the end of the third text, the guests clap their hands, and the musicians catching the sound beat their drums. When the music is over the boy is seated on the right of the girl on another chair and wine is banded to all present. The minister, putting his right band on their heads, blesses the boy

first and then the girl. He takes almonds betelnuts and other things from one of the plates, fills the girl's lap with them, and a relation, either of the boy or the girl, presents the minister with almonds, betelnuts, and other articles from the other plate.

Gift-making or Aher.

Next comes the gift-making or aher. The presents are ornaments, clothes, and money. When cash presents are made the minister is paid $1\frac{1}{2}d$. (1 a.) by each giver and the giver is not allowed to go until he pays it.] The girl's mother hands the minister a gold ring worth 8s. to £1 (Rs.4-10). The minister calls out for name, names the present, and, putting a little sugar into the boy's month, hands the ring to the boy. Others follow, each man or woman going to the minister whispers in his ear his or her name, and hands him the present. The minister calls out the giver's name, states what the present is, and putting a little sugar into the giver's mouth makes the gift over to the boy. When all the boy's presents are received, the girl's relations come forward, and in the same way through the minister make presents to the girl. In the same way the boy's and girl's fathers make presents to their relations ending with a special present of a shilling or two to the guests for leave to untie the knot that fastens the hems of the bride's and bridegroom's garments. The rest of the sugar is handed round or is melted in water and drunk. Then the boy and girl leaving their places are taken to a table, and blessed by the minister, laying 2s. to 10s. (Rs. 1 - 5) on the table. While the guests sing, the boy and the girl walk round the table and kiss the torn or roll of the law. When they come near the steps of the synagogue, the singing stops, and the boy is set on the horse and the girl taken away either in a palanguin or a carriage. The procession then starts with lighted torches music and fireworks to the girl's house. At the girl's house her brother, standing near the door, drops a little sugar into the boy's month, hands him a cocoanut, and squeezes his right ear. The boy gives him a cocoanut and he goes back into the house. Then the girl's relations, helping the boy and girl to alight, tie the hems of their garments, and walking together side by side they go and stand in front of the house steps. An elderly woman brings a handful of cooked rice or ambat at in a dish, and waving it round their heads throws the rice into the street. Then, with singing, the boy and girl are taken into the house and seated side by side, the women quests follow the pair, and the men sit in the marriage hall. In the house the women relations of the girl with their husbands wash both the boy's and girl's feet, the husbands pouring the water and the wives washing the feet. When their feet are washed, between eleven and twelve, the boy is led into the marriage hall and

feasted with the men, while the girl feasts with the women in the house. When the feast is over betelnut and tobacco are handed round and the guests take their leave. After they are gone the bridesmaids lead the boy and girl to a separate room where they pass the night. [Among the old Jews this would seem to have been one of the duties of the groomsman. Next morning, the third day, the boy and girl bathe, and, dressing in their marriage clothes, are seated face to face on a sheet. About eight some cocoa or cow's milk with sugar is brought and they feed one another. Two hours later guests begin to come, the boy's friends are sent for, and a meal of rice, split peas, dry-fish, vegetables, and pickles is served. After the meal is over most of the men leave and the rest, sitting with the boy and girl in the marriage hall, watch the boy and girl biting pieces of betel-leaf and cocoa-kernel out of each other's mouths. Other married couples, even old men and women, do the same, and the morning passes in much merriment. Then the older people retire, and till about four the children play at odds and evens, or hide and seek. About four, with the singing of special songs, the girl's hair is combed and dressed with flowers, and her wedding robes are put on. A kinswoman leads the bride's mother and seats her near the girl, and while scoffing songs are sung, her hair is combed, and with much laughter and mockery decked with paper and tinsel ornaments. After the amusement has gone on for an hour or so they retire into the house. In the evening, when the guests begin to come, her mother fills the girl's lap with almonds betelnuts and dates, and gives the boy a silk handkerchief and a gold or silver ring. Five married Women touch the boy's knees shoulders and head with grains of rice, the boy and girl stand facing the women, and the boy bows low to each, and is given a silk handkerchief. Then the boy and the girl pass through the marriage hall, where the girl's father has been entertaining some guests, and with songs are led out and the boy is set on horseback, and the girl with her maids of honour or *karavlis* is carried in a palanguin or carriage. A big silk umbrella is held over the boy and on either side a silver' fan and a fly-flap, and to pacify evil spirits a cocoanut is broken or an egg is smashed under the horse's right forefoot. [This custom] has lately been given up. The procession moves on to the synagogue with music, lighted torches, and fireworks. The expense '2s. to 2s. 6d. (Rs. 1 - 11/4) of lighting the synagogue is borne by the girl's father.] At the synagogue door they begin to sing and the boy and girl are taken in and made to stand near the table before the law scrolls or safar tolas. The girl's father lays 2s. to 10s. (Rs. 1-5) on the table and the minister, placing his right hand first on the boy's and afterwards on the girl's head, blesses them. The boy and girl pass round the table, kiss the law scroll, and with songs are led out and the procession

moves on to the boy's house. [If the boy belongs to another village a feast is given.] At the marriage hall door some slay a goat, [The carcass of the goat is not eaten but thrown on the street to satisfy evil spirits. This is not now practised by the Bene-Israels.] and sprinkle a line of blood from the marriage hall to the house door, for the boy and girl to walk along. When the guests are met a sheet is spread and the boy's father and mother are seated on it side by side. Then the boy is set on his father's lap, and while the girl is being seated on his mother's lap, the boy says to his parents, Take this your wealth. Then the boy's kinswomen wash the boy's and girl's feet, the boy presenting them with 2s. to 4s. (Rs. 1 - 2). After a dinner to the men in the marriage hall and to the women in the house the guests withdraw.

Fourth Day.

About seven next morning, the fourth day, in the girl's house, after some biting of betel-leaf and games of chance, the boy and girl are set on two low wooden stools and bathed in cold water by five or seven married women. The boy leans over the girl, and, filling his mouth with water blows it in spray over her face, and she in the same way blows spray over his feet. The boy blows water on the girl's mouth that she may not be talkative, and the girl blows water on the boy's feet to show he is her lord. The root idea is to blow off evil, water and blowing being both modes of spirit-scaring. As in other cases a happy symbolic explanation has saved a custom. After the bath the boy and girl dress with the greatest haste, vying with each other who shall be dressed first. Relations present the boy's and girl's mothers with robes and bodices, and the boy and girl are led into the house and a feast is given. [This is a rich meat feast. If money has been paid into the synagogue fund, only relations stay for it; if no money has been paid all the guests must be entertained.]

Fifth Day

Next morning, the fifth day, the boy and girl bathe in hot water and feed one another In the afternoon they are dressed and the boy asks his wife to lend him one of her ornaments to treat his friends to a cup of liquor. She hesitates, asks her people, and after some delay gives him an ornament. The boy takes a party of friends and goes to his nearest relation's house, where a boy is dressed in woman's clothes. After some time the girl with some other women starts in search of her husband. When they are heard coming near the house the bridegroom hands the ornament to the boy in woman's clothes and all lie down, cover themselves with mats, and pretend to sleep. Presently the girl

comes in and seeing her husband calls him, and shakes him, but he does not move. She searches for the ornament, and not finding it searches the boy in woman's dress. When she finds it she charges her with theft. The boy-woman denies that she is a thief and declares that she is a prostitute and that she got the ornament from the bridegroom as a present. When the girl hears this she asks the woman to let her and her husband go and promises to pay her all her dues. Then the master of the house entertains them, and they return to the girl's. When they reach the house the girl's sister stands at the door and refuses to let them in till her brother-in-law promises to give his first daughter in marriage to her son. He refuses, she persists, and in the end he agrees. This is only a form the agreement is seldom carried out.

Sixth Day.

Next day, the sixth, after bathing dressing and feeding, the girl is sent to draw water. When she comes back she asks her mother-in-law to help her to put down the waterpot. The mother-in-law is too busy and tells her son to help his wife. He lifts down the waterpot and the girl carries it to the cookroom. The rest of the day passes in biting betelleaf and playing at odds and evens. In the evening about seven the boy and girl are rubbed with cocoa-milk, bathed in warm water, and led to the cookroom, and the girl bakes in oil ten or twelve pulse cakes or *vadas*. When they are ready the boy takes the cakes out of the pan and going into the outer room, he and the girl sit facing his father and mother. A married woman takes the marriage ornaments or *shera* off the boy's and girl's brows, and, after being for a few minutes bound round the brows of the boy's parents, they are thrown into water or fastened to the rafter of the house roof. The day closes with a supper.

Seventh Day.

Next day, the seventh, the girl's mother comes to the boy's house and asks the family to dine with them. [According to custom when one of the marriage families asks another to dine with them the minister must always bring some gift however small] They go, and are feasted. In the evening the girl and the boy are taken to the cookroom, and the girl makes rice-balls, fills them with cocoanut scrapings and molasses, and boils them. When they are ready the boy and girl pick five or six out with their own fingers. At the evening meal the girl's mother presents the boy either with a silk handkerchief or a gold or silver ring. Early next morning, the eighth, the boy and girl, with a few relations, are sent to the boy's home. They are then taken to the houses of such

of their relations as were not able to be present at the wedding, and to the houses of friends and neighbours of other castes to whom sugar presents were not made during the wedding days. Besides this, which is the last of the marriage ceremonies, two dinners, called *mamjevan* and *vyahijevan*, are given within a month the first by the boy's father and the second by the girl's. A son's marriage costs a Bene-Israel £20 to £50 (Rs. 200 - 500) and a daughter's £10 to £20 (Rs. 100-200). Among Bene-Israels a second wife may be married if the first is barren; if her children have died; if all her children are girls; if the husband dislikes his first wife; if her father refuse to sent his daughter to her husband; or if the wife runs away.

Birth.

After the rites during the seventh or eighth month of her first pregnancy, of which details are given below, the young wife, who is often not more than fourteen, is taken home by her mother. She is fed daintily and decked With flowers and rich clothes. A midwife, who is generally a woman known to the mother's family, attends her, and when the girl's time comes is called in. The girl is taken to a warm room, and one or two of the elder women of the family gather round her. As soon as the child is born, if it is a boy a metal plate or thali is rung, and cold water is sprinkled over the infant. Till the mother is washed and laid on a cot, the babe is allowed to lie in a winnowing fan. It is then washed in warm water, the navel-cord is cut, its head is squeezed to give it a proper shape, its nose is pulled straight, and its ears are bent. If a woman has lost any children the right nostril is bored, that if he is a boy the child may look like a girl and if it is a girl her left nostril is bored that she may look ugly or *khodlele*. The child is bound in swaddling clothes, laid beside its mother generally to her right, and to ward off evil spirits a knife is placed under its pillow. The words Adam and Eve away from hence, or Lileth Adam's first wife, are sometimes engraved on a silver plate and hung round a child's neck. Word is sent to the child's father, and the midwife retires with a present of 1s. to 2s. 6d. (Rs. $\frac{1}{2}$ - $\frac{1}{4}$), a pound of rice, and a cocoanut. A dim brass lamp is kept burning near the child's face, and, for the rest of the day, except a few dates and a little cocoa-kernel and liquor the mother generally fasts in the name of the earth or dharitri. For three days she is fed on wheat paste mixed with butter and molasses, and for forty days she drinks hot water, and after the fourth day she is fed with chicken broth and rice. For seven days she does not leave her bedroom without tying a handkerchief round her head and ears, throwing a blanket over her shoulders, and wearing sandals or vahans. Every evening the babe is rubbed with turmeric, mixed with rice flour

and the white of an egg, and bathed in hot water. Before drying the child, the midwife, to overcome the evil eye, takes water in a metal pot, and waving it thrice round the child, empties it on her own feet. [Bene-Israels believe that the evil eye of jealousy harms a child if it is seen feeding or wearing good clothes. To overcome the evil eve they go either to a midwife or to some wise woman of their own caste. There are two kinds of evil eye, the dry or suki and the wet or oli. To overcome the dry evil eye the child is bathed in the evening and seated on a low wooden stool, and a woman, taking some salt and ashes in her hands, waves them fifteen to twenty times from the child's head to his feet muttering charms or mantras. She throws the salt and ashes into an oven, and, taking a pinch of ashes, touches the child's brow and the sole of the child's left foot. If the salt thrown into the oven crackles she says the evil eye was very strong and abuses the person whose sight had fallen on the child. To overcome the wet or oli evil eye, against which the salt and ash cure is powerless, the child is seated on a low wooden stool and is given a little salt, some grains of rice and turmeric, and told to chew them. The woman places two pots near, one with fire and the other with water, and takes in her left hand a shoe, a winnowing fan, a broom, and a knife, and asks the child to spit what is in its mouth over the fire. She pours the fire into the waterpot and waves it from the child's head downwards muttering charms. The evil eye is also cured by hanging to the child's neck a metal or cloth box or thavij, about an inch square, with a piece of paper scribed over by a sorcerer. This box not only heals the sick and devil-ridden, but kills enemies, gives children to barren women, work to the idle, and to every one their special wish. According to the sorcerer's name for skill the box varies in price from a farthing or two to as many pounds. Ministers as well as sorcerers give these charms.]

During the first day the child is fed by giving it to suck a cloth soaked in coriander juice and honey. The. second day it is fed on goat's milk, and it is given the breast from the third day. To keep off evil spirits lines of ashes are drawn outside of the mother's room. News is sent to relations and friends, and they come to greet the mother, bringing small presents of cloves and nutmeg. The guests are offered sugar betelnut and leaves, and after smoking a pipe of tobacco, retire.

Third Day.

In the afternoon of the third day the ceremony called *tikhondi* is performed. The mother fasts and a girl from the house starts to call women relations and friends. The guests begin to come between one and two. A lighted brass lamp and a plate with a mixture called

suthora of dry ginger, turmeric, garlic, molasses, bishop's weed or ova, and cocoa scrapings, is prepared and placed before the guests. The mother is bathed and with the child in her arms is seated in the middle of the guests. The lighted lamp is brought before her and she kisses it. Then one of the elderly women, to satisfy the spirits called chari bori takes the plate in her hand and throws a little of the contents into each corner of the room. Songs are song, and each of the guests is given some of the mixture and withdraws.

Fifth Day.

On the fifth day, in honour of panchvi or the spirit of the fifth, girls go round calling women friends and relations. The guests begin to drop in between one and two, bringing cocoanuts for the mother. As they come they are met by the elderly women of the house and seated on mats near the mother's room. When the quests have arrived, amid the din of music, the mother takes the infant in her arms, and holding in her right hand the knife that cut the navel cord, the karay [Karay is a long and slender tree used in paling and fence work. stick on which the navel cord was cut, and a prickly pear or *nilgut* twig, sits on a low wooden stool in the middle of the guests. An elderly woman brings a brass lamp with five lighted wicks, and on the lower part of the lamp the mother places the knife, the stick, and the twig. She takes a few grains of rice, lays some near the knife, and throws the rest about her. She holds both her ears, and three five or seven times kisses the lamp, muttering to herself the prayer *Me thene*, that is Two children in three years, repeated three five or seven times. Then the mother takes her seat on a cot facing east, and the shejbharni or grainsticking ceremony begins. While the guests are singing [The words are: Five wicks in a lamp, each with a separate flame; such was the lamp which was waved before the prophet Elijah. Perform the shej or grain-sticking ceremony to this woman Rebecca now in childbed. Another song sung about the same time runs: O sun O moon ve go by the way leading to the abode of the child's grandfather. Give this our message to him, if indeed he is alive, that he should wash his hands and feet and pray to God live instead of three times a day, so that God may confer blessings upon the child. The words in both cases are Marathi.] an elderly woman brings a winnowing fan containing rice, a cocoanut, a betelnut, and two betel-leaves, and a copper. She takes some grains of rice from the fan, throws some at the mother's feet knees and shoulders, and the rest behind the mother's back. This is repeated either five times by one woman or in turns by five women chosen from the quests. The woman on whom the turn last falls has, in addition, to touch both the mother's and child's brows with grains of

rice. Next follows the lap-filling or *otibharni*. A married woman takes about a pound and a half of rice and fills the mother's lap with it repeating the Hebrew words *Baalim adonya* that is In God's Name. After the filling comes the waving or *ovalni* when each of the women present waves a copper coin round the mother and child and puts the coin in the brass hanging lamp. [The whole amount from *3d*. to 2s. (Re.½-1) is distributed among the girls of the mother's family.] Then follows the vow-taking and after that the guests are served with boiled gram or parched rice, sugar, liquor, and betelnut and leaves.

Sixth Day.

Next morning, the sixth day, boys go round and invite men to come in the evening. About nine o'clock guests begin to drop in and as they come are seated on mats spread in the veranda. Then to a tambourine or *daph* accompaniment they begin to sing in Hebrew Hindustani and Marathi, while the rest sit quiet. Parched rice or boiled gram and sugar are handed round and till dawn liquor is freely drunk. When she goes to bed the mother changes her child from her right side to her left, and in the child's place lays a stone roller or *varvanta* covered with cloth. At the dead of night the dread spirit Sati comes to scratch from the child's brow what God has written there in its favour, and finding a stone goes away disappointed. Next day the roller is taken away.

Seventh Day.

On this day, the seventh, the mother's room is changed and women relations and friends are asked to come. A brass hanging lamp is lighted and placed under a bamboo basket or ravli. The mother takes the child in her arms, and goes several times out and in from the house to the veranda or the street, while one of the quests keeps repeating in Marathi, 'O moon O sun, look at our child, it is out.' When the mother finally comes in, water and turmeric powder are dropped on her from above the entrance door. She lave the child in the middle of the cot on a small matress covered with a white sheet and round the mattress drops seven or nine pinches of boiled gram and two pieces of cocoa-kernel. When this is ready each boy or girl of the party goes near the child, gently catches it by the ear, and says, Come away child, let us go to play and eat a dish of rice cakes. The Marathi runs: Yere bala khelaya java an satichi mutki vatun khaya. Then each boy takes some of the boiled gram, and, as he runs away, is struck with a twisted handkerchief by another boy who stands behind the door.

Circumcision.

In the synagogue, [If there is no synagogue the rite is performed in the house where the boy was born. on the eighth day after the birth of a male child, [Only males are circumcised. If the child is weakly the rite may be put off for a few days.] whether or not it is the Sabbath, two chairs are set side by side, one for the prophet Elijah who is believed to be present at the circumcision, [All Jews leave a chair for Elijah. The story is that he wished to die because the Jews disregarded the rite and could not be comforted except by a promise from God that the rite should always be respected. Basnage, 422-423.] and the other for the operator who is either the minister, the boy's father, or some other man acquainted with the details of the rite. From ten to eleven in the morning guests begin to drop in. When enough have come, for at least ten should be present, the operator goes to the chair intended for the prophet, lifts it over his head, and muttering some Hebrew verses restores it to its place. If the child is to be circumcised at the synagogue, he is taken in a palanguin in his mother's arms, accompanied by men and sometimes by women quests, and, unless it is the Sabbath or a holiday, by music. When the party reach the synagogue the child's maternal uncle takes him to where the guests are sitting, and says Shalom Alekham or Hail in God's Name. To this the congregation answer Alekham Shalom or In God's name Peace. He hands the child to one of the elders who has taken the prophet Elijah's chair. The operator sits on the other chair and circumcises the child, the people singing Hebrew songs, and the boy's father sitting praying covered with a yeil. Outside of the synagogue a cock is sacrificed and taken to be cooked at the child's father's house. Raisin wine and milk are thrice given to the child to guiet him. The wound is dressed with brandy and oil and the child is blessed by the minister and called by a new name chosen from the Old Testament. [Bene-Israels are called] either by Hebrew or Hindu names. The Hindu male names are Babaji, Dhondu, Dharmaji, Yesba, Kama, and Sakoba. The female names are Yesu, Ladi, Soni, Dhondi, and Baya. A child's first name is often changed. If a child is dangerously ill his parents vow that if the sickness abates they will change its name, and when a girl is married her husband's people give her a new name. Surnames are derived from names of villages such as Agaskar, Divekar, Majgavkar, Korgavkar, Nagavkar, Penkar, Punekar, Nagarkar, and Talegavkar. They call their father aba and papa; mother aya or ai; brother dada; sister baya; daughter sokri; child bala; brother's wife bhabi; father-inlaw and maternal uncle *mama*; and paternal uncle, *nana* and *kaka*.] Then, except on the Sabbath or on a fast day when nothing but the raisin wine is used, the guests are treated to cocoa-kernel and sugar cakes. The child is presented with silver coins and silver and gold ornaments and the minister is given a fee of 3d. to 1s. (2-8 as.). No

record of the circumcision is kept, but it is considered meritorious to be present at the ceremony. The party go back to the mother and sing a hymn, and eat sugar, parched gram, and liquor. The cock is presented to the minister and the quests retire. If a child dies before it is circumcised, the operation is performed after death, but no prayers are offered. Boys, as noticed above, are named on the circumcision day. Girls are named at any time from the fifth day to one month after birth. [Some Bene-Israels do not ask the minister to give their girls a name and simply call her by some name they have chosen in the house.] On the night fixed for the naming the minister and relations are called, and a lighted lamp is set on a stool covered with white cloth near the mother's cot; close to the cot are arranged plates of fruit and cups of milk and honey. The minister, placing his right hand on the child's head, repeats Hebrew verses, in which the name to be given to the child occurs. He retires, and the night is spent in singing and drinking.

Cradling.

On the morning of the twelfth day the mother and child are bathed and a cocoanut is broken and its water is sprinkled on all sides. The mother or some other woman lays the child in the cradle repeating the Hebrew words *Bashim adonya*, that is In the Name of God, and pulling the cradle by the string sings songs. Cocoa-kernels and sugar are handed round.

On the thirteenth day a few Bene-Tsraels perform the rite of redeeming their first-born sons. The father, taking his son and asking his friends and relations to come with him, goes to the synagogue, and coming before the sacrificial priest says, I present you this my first-born son, and gives him in his hands. The *cohen* [The sacrificial priest is called *cohen*. The post is hereditary, but as sacrifices are no longer offered, the *cohen's* only duty is to bless the congregation in the synagogue.] looks at the child, and, asking 4s. to £1 10s, (Rs, 2-15), hands him back to his father and blesses him.

Purification.

On the morning of the fortieth day after a boy's birth or the eightieth day after a girl's birth, the minister is sent for. When he comes a pot fall of water is placed before him. He takes a twig of *sabja*, dips it into the waterpot, pronounces a blessing, and retires. The mother and child are bathed together in hot water, and the mother, taking the child on her lap, pours both on herself and her child seven small pots full of the

water that has been blessed by the minister and they become pure. [When the mother has to leave the house before the proper time, the purifying has to be twice gone through at the time of quitting the house and after the end of the fortieth or the eightieth day as the case may be.]

Shaving.

In the afternoon of the purifying day the child's head is shaved. [If the child is the subject of a vow its hair is allowed to grow from one to five years. The child is then taken in procession on horseback with music to the synagogue. A new handkerchief is spread on its lap, and that the hair may not weigh heavily the barber shaves its head without using water. At the end of the shaving the barber is presented with the handkerchief, a pound of rice, a cocoanut, a betelnut and two leaves, and a copper coin. The child is bathed in warm water, dressed, and seated on the pulpit or teba. Here the hair is weighed either against gold or silver and the metal is presented to the synagogue. The priest blesses the child and the hair is put in the mother's lap who throws it into water. When this is done the child is made to stand in the doorway of the synagogue and a metal plate or thali is held upside down over its head and rice flour balls are rolled one after another front the plate and scrambled for by children. Some elderly person, either a man or woman takes the child on their lap, spreads a handkerchief over the child's knees, and the barber shaves its head. When the shaving is over the barber is presented with 6d. (4 as.) in cash together with rice and half a cocoanut, the other half being divided among the children of the house. The child is bathed, [Bene-Israels think that a barber's touch defiles. After being shaved they do not enter their synagogue until they bathe or at least until the part shaved and their hands and feet are washed.] seated on a low wooden stool, and rice flour balls are rolled from a brass plate held over his head. In the evening a dish filled with pieces of rice-bread and mixed with molasses and pieces of cocoa-kernel is placed before the minister and he blesses the bread and distributes it among the persons present. This last rite known as *malida* is observed only by a few.

Mother's Return.

Three or four months after the mother is purified the father's mother sends to ask that the child and the mother may be sent to her house. Two or three days after the girl's mother calls her nearest relations, and with the child and young mother, takes a present of a robe, a bodice, child's clothes and ornaments, and a cradle, with bedding and

toys, to the girl's mother-in-law's house. When they arrive they stand on the veranda, and a woman coming from the house with cooked rice or *ambat bhat*, waves it round the mother's and child's head, and throws it away to satisfy evil spirits. The mother, with the child in her arms, walks into the house followed by the women guests and the presents. A dinner is served to the guests, the girl's mother is presented with a robe and bodice, betel is handed round, and the guests leave. [Sometimes the girl's mother and a relation or two are asked to stay for a couple of days.] When the girl's parents live at a distance and she is confined at her husband's house, she and her child are removed to a near relation's for a few days, and return with gifts bought at her mother's expense.

Ear-boring.

Any time after three months a child's ears are bored. [In some families when the child is to be sent to the father's house the lobes of its ears are bored before leaving.] A girl's ears are bored in three places in the lobe, and in two places in the upper cartilage. When the ears are healed a girl's nose is bored, generally through the right nostril, by a Hindu goldsmith, who, besides a present of rice receives for each hole bored ¾d. to 1½d. (½-1a.). The holes are kept open by fine gold rings not by thread as among Hindus. [In former times the Indian Bene-Israels bored the cartilage of a boy's ears. But when they came to pride themselves on Hebrew customs they gave up the practice, as among the old Palestine Jews a bored upper ear was the sign of a slave.]

Vaccination.

The ceremonies connected with vaccination and small-pox are generally performed with much secrecy, except in places without a synagogue where till lately they were done openly in the same manner as among cultivating Marathas and other lower class Hindus. The small-pox goddess Shitaladevi, seven married women or *savasins*, and a boy or *govla* are worshipped. When the lymph has taken, songs are sung in praise of the sores and of the goddess; the child is considered sacred and bowed down to, and neither fish nor flesh is eaten. Of late years special vaccination services are said to have ceased.

Foot-lifting.

When, between a year and a half and two years old, a child begins to walk, the mother takes a cocoanut, breaks it in front of its feet, and divides the kernel among little children.

Skirt-wearing.

The first ceremony after marriage is, when the girl reaches her twelfth year, the putting on of woman's dress. This is known as the lucky dress, mursada or padarsohla that is skirt-wearing. [No ceremony of this kind is performed when the girl is twelve years old at the time of marriage.] On the morning of the girl's twelfth birthday a woman is sent with music from the boy's house to the girl's house, and asks the girl's mother to return with her and bring her daughter and friends. At the boy's house the boy and girl are bathed, dressed in rich clothes, and seated facing each other on wooden stools covered with cloth. A married woman fills the girl's lap with betelnuts, dates, almonds, and rice, and her hair is combed and decked with flowers. Five married women, lifting from her shoulder the end of the girl's robe, spread it on her head, and put a little sugar into the boy's and girl's mouths. The boy retires, and for about an hour the women sing Hindustani or Marathi songs accompanied by a drum, and are then dismissed with betelnut and leaves. The guests are feasted. After spending a day or two with the boy's family the girl gets a present and goes back to her father's house.

Puberty or Nahandcha Sohla.

When a girl comes of age her mother sends word to the boy's mother and asks her to come to her house on the eighth day, to fix whether the age-coming ceremony shall take place at the girl's or at the boy's. Unless the girl's parents are rich or are willing to undergo the expense the ceremony generally takes place at the boy's. When the ceremony is to take place at her house the boy's mother, on the morning of the eighth day, accompanied by music, goes to ask the girl's mother and other female relations. They come between eleven and twelve. The girl is bathed in warm water, dressed in rich clothes, and seated near the women facing east. The boy comes richly dressed and sits facing the girl. About five married women, going near the girl, comb her hair and deck it with flowers, throw garlands round the boy's neck, sprinkle sweet-scented oil on both, and put a nosegay into the boy's hand. Another married woman fills the girl's lap with almonds and betelnuts, and five married women, taking rice in both their hands, wave thorn in front of the girl's knees shoulders and head. The boy and girl repeat each other's names and the boy retires. Sugar is handed to the quests, who, after a couple of hours of song-singing to a drum accompaniment, are dismissed each with a packet of betelnut and leaves. At bedtime the boy's mother takes the girl to the boy's room, and leaving her there shuts the door after her. [In honour of this event the boy's father gives his friends a present, and on a Sabbath, after morning prayer, treats them to liquor.]

Pregnancy or Garvaricha Sohla.

In the seventh or eighth month of a woman's first pregnancy female friends and relations are called to the boy's. About twelve, when the guests have come, the girl is bathed and seated on a low wooden stool facing east, and five married women comb her hair, fill her lap, and wave grains of rice round her. The sugar is served, special songs are sung, betel is handed round, and the guests withdraw.

Death.

A few hours before death, if the dying person is a male, a barber is called to shave the head, and when the barber leaves the nearest relations shave the whole body except the face. The dying man is then bathed, dressed in clean clothes, laid on a fresh bed, and, so long as sense remains, the minister reads the sacred books to him, and lays a copy under his pillow. When at the point of death sugarcandy and grape juice are dropped into his mouth, his eyes are closed, and he is comforted with the promise that his children and property will be cared for. When all is over the son rends his clothes, and the widow, dashing them against her husband's cot, breaks her bangles and black bead necklace. The body is covered with a white sheet, and round the body both men and women weep and wail. The great toes are tied together with a thread. The men sit on the veranda or at some distance from the bed; and a friend or neighbour goes to tell the relations of the death. The body is measured, and a man goes with a few labourers to dig the grave. From 14s. to £1 10s. (Rs. 7 - 15) is handed to a friend to bring what is wanted from the market. [The details for a man are: Twenty-two yards of cloth worth 14s. (Rs. 7) are made into trousers, a small shirt or kaphni and a large shirt also called kaphni reaching the knee a cap, a shouldercloth or dupeta, a turban, a waistscarf or kambarband, a cloth to tie the hands, a cloth for the eyes, a pillow, a towel, a *lungior* pair of drawers and sheet or *mot*, a sisid or shroud worth 5s. (Rs.2½), cotton worth $\frac{1}{2}$ d. ($\frac{1}{3}$ a.), frankincense, needles and thread, a piece of soap, and scented oil worth 3s. (Rs. 1½), flowera and sabja or henna $1\frac{1}{2}$ d. (1a.), seven earthen jars worth 1s. 9d (14 as.), the grave-diggers 4a. (Rs.2), and liquor and tobacco 5s.

(Rs. 2½) total about £1 13s. (Rs. 16½). For a woman the details are; A pair of trousers or ijars, a robe or patal, a headcloth, a large and a small kaphni or, shirt, a shawl or odni to put round the neck, a sheet or mot, a handkerchief for the hand, a handkerchief for the eyes, a pillow, a towel for wiping the body, and a sarposh or over-robe. Altogether 32 yards worth 18s. (Rs. 9), a khol of seven yards worth 5s. (Rs. 2½); incense, oils, needles, and flowers, as for a man 3s. (Rs. 1 $\frac{1}{2}$), cotton worth $\frac{1}{4}$ d. ($\frac{1}{3}$ a.), seven earthen jars worth 1s. 9d. (14) as.), flowers and sabja worth $1\frac{1}{2}$ d. (1a.), grave-diggers 4s. (Rs. 2), and liquor and tobacco 5s. (Rs. 2½); total about £1 17 (Rs. 1½). For a child the details are the same as for a man or woman, except that only about ten yards of cloth are used.] When he comes back others help in making the grave clothes, a pillow, a cap, and a pair of trousers. The cot on which the body is laid is then removed, the ground underneath is dug, and the cot replaced. [If the deceased has no relations it is now that he is shaved. The funeral ceremonies should be performed by a son. All Rene-Israels greatly desire male issue. Failing either a son or an adopted son a relation is asked to perform the ceremonies and for a year to pray for the dead in the synagogue. The body is then rubbed with cocoanut milk, and soap, and twice washed in warm water. Then, while the minister stands by, seven jars of water are poured over it from the head to the feet and dashed on the ground. Then the body is carried to another room, the wet clothes are taken off, the body is wiped dry, laid on a mat covered with a white sheet, and dressed in the newly made grave clothes, in which spices are laid. Then the surplice or sisid is drawn, or a handkerchief and a sabja twig are placed in the right hand, the body is rolled in a broad sheet and the face left partly open that the mourners may take a last look. [A woman is dressed in the same way as a man with a robe or sadi in addition. The minister asks the mourners to forgive the deceased any faults he may have committed. They answer, They are forgiven. Flakes of cotton wool are laid on the eyelids, and a handkerchief is placed over them, and the face is covered with the sheet. To keep the sheet in its place, cloths are tied round the legs, the waist, and the head. Meanwhile one of the mourners has gone to the synagogue and brought the coffin or dolare. He sets it in front of the door, washes it with cold water, and spreads a white sheet inside of it. After the minister has repeated Hebrew verses for about fifteen minutes the body is carried, head first, out of the house by four or five men, and laid in the coffin. A wooden frame is dropped over the coffin, and on the frame a chintz cloth and flower garlands and sabja leaves are spread. Headed by the priest the deceased's four nearest relations lift the coffin on their shoulders and, repeating Hebrew verses, walk to the burial ground, helped at intervals by the other mourners. Within a few

paces of the graveyard the mourners halt, the minister repeats sacred texts and the bearers, entering the graveyard, place the coffin near the grave. Two men go into the grave, and three others, one holding the head, another the feet, and the third tying a a cloth round the waist lower the body with the head to the east. [Formerly the grave was sprinkled with milk, water mixed with rice flour, cocoa-kernel, and rice grains. Each of the mourners takes a handful of earth and stuffs it into the pillow case. The two men in the grave fill any hollows there are below the body, lay the pillow under its head, and come out of the grave. [If any one has dust from Jerusalem, a little of it is put into the pillow case. This dust is sold by merchants coming from Jerusalem at 4s, to 10s. (Rs, 2-5) an ounce. A little of it is kept in most Bene-Israels' houses. Earth, one of the leading spirit-scarers, is thrown on the body by Jews, Musalmans, Christians, and many Hindus. A few mourners standing near repeat texts and throwing a handful of earth into the grave turn away. The rest come and each throws a handful of earth into the grave and goes quickly away. The diggers then fill the grave. When it is full the mourners going to the other side and facing west repeat prayers, and on leaving the graveyard, each thrice over plucks a little grass with both his hands and throws it behind his back. [This is said to mean that their people may grow in a number like blades of grass, or as a sign that all flesh is grass, and the glory of man like the flower of the field. The practice is observed by other Jews. Like the throwing of earth the throwing of grass is originally with the object of scaring spirits. The holiness or spirit-scaring power of grass is shewn in many Hindu ceremonies. The origin of the spiritscaring power of grass is perhaps the memory that the first food grains were grass grains such as Hindus eat on fast days. Or grass may have been eaten as medicine by early men as it still is eaten by dogs and cats.] The coffin is brought back on a carrier's head, and kept in its place in the synagogue. [If a Bene-Israel dies on Friday evening he is not buried till Saturday evening. The funeral party go to the dead man's house, wash their hands and feet on the steps, sit on the veranda, and after smoking or drinking a draught of liquor go to their houses. In the evening near relatives and friends bring cooked dishes and dine with the mourners from the same dish. On the spot that was dug under the cot where the dead breathed his last, a mat is spread and near by are set a lighted lamp and an earthen pot filled with cold water. The women mourners for seven days sit, sleep, and dine on the mat, day and night feeding the lamp and keeping it a-light. [This is called keeping the mat alive, chatai jagine. This practice is observed by other Jews. The first seven days are kept strictly as days of mourning. The members of the family neither go out, sit on chairs, bathe, eat any thing substantial, or drink liquor. [These practices are

all observed by other Jews. The men wear no turbans and do not salute their friends, and every morning ten religious-minded men read the sacred books in the house of mourning. On the morning of the third day the minister, helped by a few of the people repeats sacred texts. On the evening of the sixth day he comes and is presented with a plate filled with sweetmeats and sweet-scented flowers. Over this plate he repeats verses and together with the mourners eats sweetmeats. In the afternoon of the seventh day women relations and friends with cocoanuts in their hands go to the mourner's house, and with cocoanut oil rub the women's and their own heads, and after bathing them return to their own houses and themselves bathe. Meanwhile the minister with about ten men goes to the mourner's house, and the chief mourner, taking the waterpot that was placed on the spot where the deceased's cot stood, along with the minister and the others, goes to the burying ground. He makes a hollow about six inches deep on the spot where the deceased was buried, sets a stone at the head and a smaller stone at the foot, and at the right side six stones and at the left five. The hollow is partly filled with earth and the spot is well beaten. [If a slab is to be put on the tomb it should be done within a year. After that any one putting up a slab must first give a feast to his castefellows. Then the chief mourner, taking the waterpot in his hand, pours water on the right side, then on the left side, and then down the middle, always beginning from the head. When he reaches the foot stone he dashes the pot to pieces on the ground. He then takes a twig of sabja and plants it near the head stone and sometimes lays pieces of cocoa-kernel all over the grave. The mourners turn their backs on the grave, repeat prayers, eat some cocoa-kernel, smell the sabja, smoke a pipe, and return to their homes. At the mourner's house the *jarat* is read and in the evening a feast of meat and sweetmeats is given. To this feast guests are not specially called, but as a rule all who hear that a jarat is being held, come unasked, prayers or jikhir are said, the food is blessed by the minister, and is shared among men and women. In the evening, either of this or of the next day, his relations and friends take the chief mourner to the synagogue. The minister repeats texts, and in the name of the deceased the synagogue is presented with two to five pounds of oil. On leaving the synagogue all sit on the veranda, and except the chief mourner subscribe for a drink. [Where there is no synagogue the liquor is drunk at a tavern.] When the liquor is finished the mourner is taken to his house and there entertains the rest with drink and tobacco. After the men have done, the women mourners are taken to a neighbour's house and entertained with a draught of liquor. About a month after the death the chief mourner feasts his nearest relations and three months later another small feast is given. At the

sixth and twelfth month a feast is given to a large number of castefellows, when both the *jarat* and the *jikhir* are read. The chief dish is mutton. Where there is no synagogue liquor is served, but if there is a synagogue the liquor money is made over to the synagogue fund.

Community.

In each village caste questions are settled by the headman at a meeting of the adult members of the community. He is helped by the hereditary minister or judge and the four elders called *chau-ghulas*. All persons present at such meetings are allowed to take part in the discussion, and, if necessary, to record their dissent or petition for a new trial. In taking evidence they caution witnesses to speak the truth, but do not exact a formal oath. The marriage covenant is in general strictly respected and adultery punished by a fine varying from 2s. to 4s. (Rs. 1 - 2). In aggravated cases the innocent party is allowed a divorce and the liberty of remarriage. In some places, in consequence of difference of opinion, some members have left the old community or *phad* and set up a new one, building a synagogue of their own if they can afford it. To draw more persons towards it the rules of the now synagogue are generally simple and less costly than those of the old one.

Mankari.

Among the Bene-Israels each synagogue has six office bearers or mankaria; the mukadam or headman, the chaughula or assistant, the gabai or treasurer, the hajan or minister, the kaji or judge, and the sammdsh or beadle. The mukadam or headman acts as president at caste meetings. No meeting is called without his leave. His office is hereditary. He receives a double share of any thing distributed at caste entertainments and feasts. If each guest is offered one cup of mutton or liquor the *mukadam* gets two. Sometimes a host may not entertain his relations and friends, but, however poor he may be, he must feast the headman. His office is not essential to a synagogue. Formerly he was much dreaded, but now he has little actual power. Chaughulas or assistants help the headman and devise plans for bettering the synagogue. They are chosen by the castemen from the old and respected members of the community. One of these may be asked to resign in favour of another, but he is eligible for re-election. Any one, provided he is honest, may be chosen to fill the post. The duty of the gabai is to recover outstandings and to keep an account of the receipts and disbursements of the synagogue fund. The minister or hajan is a

paid officer. He conducts public services, blesses those who make offerings of oil or money, celebrates marriages, and performs funeral and other religious ceremonies. Any Bene-Israel who can read Hebrew pretty fluently and lead the holiday service, may be appointed minister and paid £1 to £3 (Rs. 10-30) a month. For circumcising children, slaughtering cattle and fowls, and marrying, he is paid special fees varying from 1s. to 6s. (Rs. ½ - 3). Kajis are religious teachers, the descendants of men chosen when there were no synagogues. No fresh kajis are now appointed. They are not paid office bearers like the minister, but in villages where there are no synagogues, they perform religious ceremonies and get special fees for slaughtering cattle and fowls, administering oaths at caste meetings, and helping the headman and his assistants in settling caste disputes. The sammash or servant of the synagogue has to sweep and light it, to prepare the wine, to gather sums due to the synagogue, and to make them over to the treasurer. He tells people of caste meetings, of births marriages deaths and excommunications, and in a case tried before the headman calls out the names of witnesses. He is paid about 10s. to 16s. (Rs. 5 -8) a month.

Admission.

No man can be admitted a member of the Bene-Israel communitywithout being circumcised. Before either a man or woman, who has been put out of caste, [The faults generally punished by excommunication are adultery with a Mhar, Mang, or other degraded Hindu, or embracing Christianity or Islam.] is again received, their back is stripped bare, they are seated in a plate filled with cold water, and the priest gives them thirty-nine gentle lashes with a twisted handkerchief or *korda*. This ordeal is called *tobat*. The Bene-Israels send their boys to school and are a well-to-do and rising class, owning properties worth £50 to £500 (Rs. 500 - 5000).

CHRISTIANS.

Christians are returned at 9500, of whom 4335 are Europeans, 811 Eurasians, and 4354 Natives. Of Europeans and Eurasians who are mostly found at military stations in the district, 2774 or more than sixty per cent of the Europeans and 602 or more than seventy-four per cent of the Eurasians are found in the cantonment of Poona. They are chiefly military officers and soldiers, with a few civil officers and some Government pensioners. Of the Europeans 987 and of the Eurasians

332 belong to the Roman Catholic church and the rest to the different Protestant churches. Of 4354 Native Christians 2446, or more than fifty-six per cent, are found in the cantonment of Poona. They belong to the Roman Catholic and Protestant churches. Of 3720 Poona Native Roman Catholics, nearly two-thirds are Goanese. They are mostly house servants as butlers and cooks to European and Eurasian residents, a few clerks, wine shopkeepers, petty traders, coachbuilders, carpenters, and painters. In food, drink, dress, and customs they do not differ from their brethren of Goa. The remaining one-third, mostly Mhars and Mangs, are converts made by Roman Catholic missionaries. In food, drink, dress, and customs they differ little from Hindu Mhars and Mangs. The Poona Protestant Native Christians are mostly Mhars and Mangs with a few Brahmans, Marathas, and other high and middle-class Hindus. Brahmans, Marathas, and other high and middle-class converts who can read and write are teachers and catechists, and a few pastors and missionaries. Except a few who can read and write, Mhars and Mangs follow their hereditary calling of removing dead cattle and rope-making. They belong to several Protestant missions the chief of which are the Mission of the Society for the Propagation of the Gospel, the Baptist Mission, the Church Mission of England, and the American Marathi Mission. The Society for the Propagation of the Gospel in Foreign Parts was organised in 1701 under a charter from William III. In 1817 the Society began its labours in India. In 1827 Bishop Heber, while in Bombay, formed a committee in connection with the Society, but it was not until 1859 that a mission was established. At Poona the Mission has a resident missionary. The Baptist Mission, which began work in India in 1793 has at Poona, a church and two resident missionaries. The Church Missionary Society was organised in 1799. In 1807 the Society made a grant of £150 for missionary work in India. In 1818 the Society began its work in the city of Bombay and a corresponding committee was formed. The first missionary, the Reverend R. Kenney, was sent out in 1820. He preached in the city of Bombay and opened schools among which was the Robert Money Institution at Bombay. In 1846 Junnar in Poona was taken up as a field of labour where the Society has a permanent resident missionary and a bungalow. The American Marathi Mission Society was formed in America in 1810, and in 1812 the Society sent missionaries to Calcutta. The missionaries were ordered to leave the country, and two of them escaped to Bombay where they were forbidden to preach. In 1813 the missionaries earnestly appealed to Sir Evan Nepean, then Governor of Bombay, and obtained permission to preach. They preached and opened schools for boys and girls. In 1842 the Reverend O. French of this mission occupied Sirur in Poona, where they have a church under a native pastor. In food, drink, dress,

and customs the Poona Protestant Native Christians do not differ from Ahmadnagar Protestant Native Christians.

PARSIS.

Pa'rsis are returned as numbering 1574 and are found mostly in the town and cantonment of Poona. They are mostly shopkeepers, traders and liquor-sellers, and a few clerks, contractors and house and land owners. Most of them are well-to-do and on the whole they are a rising class. [A detailed account of Parsis is given in the Thanas Statistical Account, Bombay Gazetteer, XIII. 246-273.]

CHINESE.

Chinese, who call themselves Thongians, are returned as numbering twenty-three and are found in Haveli and Maval and in the city and cantonment of Poona. They say the first Chinaman who settled in Poona was Jokwangtai-tai who came into the district about twenty-five years ago from Bombay where he and some others came as sailors in Chinese ships. They say that they have a hundred surnames. People bearing the same surname do not intermarry. The names in common use among men are Afuk, Ahi, Asao, Athaun, and Ann. They hare no subdivisions, and the children of a kept woman are admitted into caste if the father gives a caste feast. The men are strong built and fair with flat hairless faces, broad brows, long narrow eyes, and snub noses. Among themselves they speak the Thanganva and Fukinva dialects of Chinese and out-of-doors corrupt Hindustani mixed with Chinese. They own no houses and pay 4s. to 8s. (Rs. 2-4) a month as rent. They cook in metal vessels, and their furniture includes tables, chairs, china plates, cups and saucers, forks and spoons. They do not eat with their fingers but with two bits of sticks. They keep no domestic fowls. Their staple food is rice, wheat, mutton, and fish. They have no scruples about eating deer, hare, cattle, hogs, and rats. Except crows and kites they eat the flesh of almost all birds. They drink both country and European liquor and freely indulge in opium, both smoking and eating it. The men wear loose rather short trousers jackets and English caps and have a long pig-tail or top-knot which falls down the back, sometimes to the ankle. They brought no Chinese women with them to India but keep Deccan women, generally Musalmans, Mhars, or Mangs. They are carpenters, shoemakers, and workers in cane. They earn £2 10s. to £3 (Rs.25-30) a month. They are of the Thongian religion and their chief god is Jokwangtai-tai. They have house images and the names of the house-gods are Kankong, Taisan, Thinsan, and Phosak. When they worship these gods they burn frankincense sticks and

candles before them, and pray to them daily. Those who have no house-gods are not required to offer daily prayers. They fast every full-moon and new-moon, and on these days they live on rice and vegetables and do not touch fish flesh or liquor. Their holidays are Cocoanut Day *Channusabasi* in August, the full-moon of *Bhadrapad* (September), and *Kaomirchhan-gyao* in *Ashvin* (October). They say they believe in evil spirits but not in sorcery, witchcraft, or soothsaying. They allow child marriage, widow marriage, and polygamy, but not polyandry. They bury their dead except the unwed, who are burnt. They say they are not so prosperous as they were ten years ago owing to the competition of English shoes and the opening of European shops. Still as a class they are well-to-do.

APPENDIX A

SPIRIT BASIS OF THE RULE IN FAVOUR OF CHILD-MARRIAGE.

OF all the classes of dead who are believed likely to walk and trouble the living none are believed to be more troublesome and dangerous than those who die with unfulfilled wishes. The great wish of a Hindu's life is to get married and have children. Therefore no class, is so likely to prove troublesome to the living as the ghosts of the unwed dead. As prevention is better than cure the Hindus seem to have arranged to keep the class of unwed dead as small as possible by, whenever they could afford it, marrying their boys and girls in infancy or in early childhood. The following examples show how strong and widespread is the Hindu fear of the unmarried dead. Among the higher classes it is laid down in the Garud Puran which treats of the state of the dead, and this is the universal belief, that boys who die after thread girding and before they are married become those most mischievous ghosts known as munjas. Other spirits of unmarried upper class dead are called athavars. To prevent them becoming athavars the bodies of the unmarried dead are rubbed with turmeric. Even the spirits of the most learned and pious high class ascetics or brahmacharis are apt to become ghosts if special rites are not performed. To prevent him becoming a ghost the Brahmachari's body is washed with water, rubbed with turmeric and oil, again washed, married with the usual rites to the great spirit-scaring swallow-wort rui Calotropis gigantea, and finally burnt along with the rui bush. Among the Mahadev Kolis of the Deccan an unmarried youth who dies becomes an athavar and receives offerings whenever a wedding takes place in his family (Mackintosh in Trans. Bom. Geog. Soc. I. 224). In North Gujarat the common village ghost is the *chudel* who is the unmarried daughter of the headman of the village. The most feared spirit in the Konkan,

perhaps in the Presidency, is the cheda, originally the same as chela a child, who is generally supposed to be a Dhangar or a Thakur lad. In the Kanarese districts, as in other parts of the Presidency, the most dreaded ghost is again the ghost of the unmarried dead. They are called Virikas and are as widely feared in Telugu as in Kanarese countries (Sir W. Elliot in Journal Ethnological Society, I.116). The Kurubars or shepherds, one of the chief Kanarese tribes, make yearly offerings of molasses red cloth and rice to please the Virikas. If no offerings are made the Virikas grow angry, send sickness and bad dreams, and strike people on the back when they walk at night (Buchanan's Mysore, I. 397). The practice among the polyandrous Nairs of marrying the corpses of their women to Brahmans, or, if they cannot afford a Brahman, to a palm tree has probably its root in the fear of the unmarried dead (Dr. Wilson's Castes, II. 75). Few examples of the fear of the unmarried dead have been traced in other nations. The Chinese think that women who die unmarried become ahosts (Gray's China, II. 16). The old English practice of strewing the path before the virgin's coffin with flowers or of carrying a garland before her may have its source in the same idea. (Brand's Popular Antiquities, II. 302, 311).

APPENDIX B

SPIRIT BASIS OF THE RULE AGAINST WIDOW MARRIAGE.

AMONG early men the belief that disease and death are caused by the spirits of the angry and unfriendly dead seems to have been universal. This widespread if not universal belief in the spirit-origin of disease explains why the original object of funeral rites was to keep the dead from coming back to plague the living. In ordinary cases the Hindu ritual was believed to be sufficient to keep the dead from coming back, or, as it was expressed in more kindly and modern phrase, to help the dead to heaven. Still the commonness of disease and of spiritpossession must in practice have raised doubts of the power of the funeral rites. Certain classes of people, those who died with unfulfilled wishes, those who died leaving objects to which they were strongly attached, and those who died leaving much property were specially likely to come back. The objects dearest to a man are his wife and his favourite belongings. If he has these with him it is probable he will not feel inclined to come back among the living. This object was believed to be secured by burning or burying with the dead his wife and his pet property. When the practice of sending his property with the dead ceased, a new system was introduced. The pet property was made over to a Brahman and the wife was set apart for the use of the dead

husband. Of the practice of making over the dead man's dearest belongings, his bed, his turban, his stick, and in some cases his books, to an outside Brahman, and of driving the Brahman to a distance from the dead man's house, details have been given above under Chitpavans. The risk of possession by the angry spirit of the dead is what makes the acceptance by a Brahman, or by any one else, of a dead man's property a sin. For the same reason, as the Brahmans were careful to prevent any member of his family using the dead man's property, they were careful that no one should make use of the dead man's dearest property his wife; they therefore set her apart for his use. The special treatment of a widow in a high class Hindu family which forbids widow marriage finds its explanation in the fact that the widow is set apart for the dead husband's use. When her husband dies the Brahman or other high class Hindu woman has her head shaved, her lucky necklace or mangalsutra, her nosering, her glass bangles, and in some cases her bodice stripped off'; she is not allowed to wear gay or coloured clothes or flowers; her brow must not be marked by the spirit-scaring redpowder or spangle, or her eyes by the spiritscaring lampblack; she must take no evening meal and must attend no lucky ceremonies. The object of most of these rules, the stripping off the lucky neck thread and bracelets and the order against the red browmark and the black eyesalve, seems to be to prevent the use of spirit-scaring articles which might prevent the dead husband from taking possession of his wife, and so annoy him and tempt him to break his wrath by bringing sickness on the family. Among Brahman and other high class Hindus who forbid widow marriage no direct proof can be given that, what is shown later on to be a common belief among the lower classes, the marrying of the widow is supposed to enrage the dead husband. Still the prevalence of such a fear seems probable from the dread with which Brahmans regard the spirit of the dead first wife, when, as is lawful and common, her place is supplied by a second wife. Among Gujarat Brahmans there is said to be no commoner cause of family quarrel than the fear of the first wife. When the second wife sickens she is believed to be worried by the first wife's ghost. The friends of the second wife go to the friends of the first wife and tell them to keep the first wife's spirit in order, and to lay it by shanti or soothing rites. The first wife's friends say she is quiet. Why should she become a ghost? We can and will do nothing. The strength of the fear of the dead husband among Brahmans and other high class Hindus may be judged by the strength of the fear of the dead husband among low class Hindus. Even those who allow widow marriage think it unlucky. The Deccan Ramoshis allow widow marriage, but they think it unlucky if not disgraceful. No women are allowed to attend a widow's marriage, and pregnant women leave the village in case they may

overhear some of the words of the ceremony. The service is read in a low tone and the houses near are deserted. The Poona Dhangars allow widow marriage but money has first to be paid to the dead man's family [apparently to make up to them for the risk they run in being attacked by the angry and homeless dead. The Lonaris, a widowmarrying Ahmadnagar class of limeburners do not allow the widow to see any one for three days after marriage. [Because apparently her eyes are evil as she is haunted by angry number one whose spirit looking through her eyes may blight any one who falls under their gaze]. The Sholapur Mangs hold widow marriage at night and will not look at the couple till the sun, the great spirit-scarer, has been up five hours. The Belgaum Korvis, a low class of basket-makers, do not allow a widow to be present at a wedding. Even the Karnatak Lingayats who ought to believe that number one is safe in heaven hold the widow unlucky. Again, among the widow-marrying classes sickness in the newly married couple is believed to be caused by the angry spirit of number one. In Belgaum when a woman of the widow-marrying classes has married a second husband if she sickens or if her husband sickens or if they have no children the woman goes to an exorcist and tells him. On a no-moon night the exorcist bores a hole in a nim tree, puts turmeric in it, and allows it to remain for three days. On the fourth day he takes the turmeric out and enclosing it in three pipal leaves burns the whole and mixing the ashes in water turns them into ink. With this ink he writes on a piece of paper and tells the woman to put the slip of paper in a box and to wear the box round her neck. Among the Somvanshi Kshatris or Chaukalshis of Alibag in the Konkan the belief is strong that, when a woman marries a second husband her first husband becomes a ghost and worries her. Whenever a woman who has married a second husband sickens she thinks her first husband, who is known as *purushvara* or the Man Spirit is troubling her. She tells an exorcist and asks how she can get rid of him. The exorcist gives her charmed rice, flowers, and basil leaves, and tells her to put them in a small copper box and wear the box round her neck. Sometimes the exorcist gives the woman a charmed cocoanut and tells her to worship it daily and he sometimes tells her to make a small copper or silver image of her husband and worship it daily. If an Ahmadnagar Mahadev Koli widow-bride sickens or if her husband sickens they think it is the work of the former husband. The widowbride gives a feast and makes a silver image and either wears it round her neck or puts it with the house-gods. (Mackintosh in Trans. Bom. Geog. Soc. I. 224). The spirit of the dead husband is much feared by low class Gujarat Hindus. They strive to please it by leaving food for it at the meeting of four roads or near the house corner. The Bijapur Shimpis allow a widow to marry once. If her second husband dies she

must stay a widow for the rest of her life. [Apparently they think that the second husband was killed by the spirit of the first husband]. Among the Poona Ramoshis if a woman who has had three husbands all of whom have died wishes to marry a fourth husband, during the marriage service she keeps a cock in her arms that the cock may lose his life and the life of the fourth husband be spared. [Apparently the object is that the spirit of number one who destroyed numbers two and three for meddling with his property may pass into the cock and let number four escape. Some examples of the belief in the unluckiness of widow marriages in other nations besides Hindus may be given. The Chinese hold widow-marriage a disgrace (Gemelli Careri [1695] Churchill's Voyages, IV. 332: Jour. Eth. Soc. II. 16). In Peru when a chief died his wives did not marry, but his housewives and children remained as in his lifetime and a statue of gold was made in his lifetime and served as if it had been alive (Spencer's Principles of Sociology, I. 330). Other nations seem also to share the Hindu dread of the dead husband and set apart his widow that the dead may go to her. In the Andamans the widow wears her husband's skull round her neck (Spencer's Prin. of Soc. I. 326). The Motu women of New Guinea when a husband or a child dies shave the head, lengthen the girdle, and wear the dead husband's hair and a piece of the dead husband's or child's bone round their neck. (Journal Anthropological Society, VII. 485). The West African negresses throw the ashes of their dead husbands into water that they may not come back and trouble them (Spencer's Prin. of Soc. I. 175). This is important as showing the original object with which the Hindus threw the ashes of the dead into water. Compare Note on Ramtirth Belgaum in Statistical Account pp. 598-599.] Among the Amazulu American Indians if the widow marries and leaves the first husband's children his ghost comes and asks her with whom have you left my children? What are you doing here? Go back to the children or I will kill you (Ditto, 261).

APPENDIX C

TRACES OP POLYANDRY.

AMONG the tribes of India the rules regarding marriage vary from a practical monogamy, through polygamy and polyandry of several forms, to promiscuousness. One of the chief points of interest in the study of Hindu customs is the evidence they furnish that many of the tribes and classes which are now monogamous or polygamous were once polyandrous. The following evidence is offered with the object of making it appear probable that through promiscuousness and polyandry most modern Hindus have risen to polygamy and to a

practical monogamy. The Buteas of Bengal (Dalton, 97) have no marriage ceremony and no care for the conduct of their wives. The Tihars of Oudh (Spencer's Prin. of Soc. I. 661) have only a nominal marriage tie. In North Arkot in Madras (Cox's North Arcot, 301) the Irulas rarely contract marriage, the association of man and woman ending at the wish of either. According to Captain Taylor some tribes in the Piney Hills in Madura have few restrictions on promiscuous intimacy (Spencer's Prin. of Soc. I 661). The Woddas of North Arcot allow their women to change their partners eighteen times (Cox's North Arcot, 301), and among the Kathi Korvas of the same district, when any man is sent to jail, the wife chooses a new partner for the term of her husband's imprisonment (Ditto, 300). According to Dubois (I. 5) among (1800) the Totiers of Madura, brothers uncles nephews and other relations had the women in common. In the Bombay Presidency many low-class Hindus in North Kanara, though strict in punishing their wives if they associate with men of low caste, allow them to associate with men of their own or of higher castes. The Bandis of North Kanara (Bom. Gaz. XV. 333) allow their wives to cohabit with any one they please except with men of impure caste. The Atte Kunbis of Kanara allow adultery with caste people only. Some Kshatris and Nairs in North Kanara allow their wives to cohabit with Namburi Brahmans. In North Bombay among the Bhatias of Gujarat the practice formerly prevailed of letting the priest pass the first night after marriage with the bride. Wives are in this way still sometimes devoted to the Maharajas, but as a rule a money offering has taken the place of the bride-offering. In Chandod, a place of pilgrimage on the Narbada, the local Brahmans, some of whom are of the high Nagar subdivision, at the holy or fair seasons leave their houses and allow strangers of good caste to live with their wives. Polyandry, the marriage of one wife to several husbands, is practised in many parts of India. It is found among several of the Panjab hill tribes (Ibbetson's 1881 Census). Among the Jats when the younger brothers are too poor to bear the expenses of separate weddings the wife has sometimes to accept her brothers-in-law as joint-husbands (Hunter's History of India, 128). The polyandry of the Ghakkars of Rawalpindi struck the early Musalmans (A. D. 1000). (Ditto.) In Southern India Tipu (1784) accused the Coorgs of practising polyandry, and, though the practice seems to have since ceased, Wilks (Southern India, II. 532) states that in his time (1811) the accusation was true. Polyandry is still prevalent among the Todas, the Kapillis of Dindigal valley, and some tribes in Coorg and the Nilgiris (Jour. Ethno. Soc. I. 119). Buchanan (Mysore, III. 17-18) mentions that though the family of the South Kanara Chief of Kumli professed to be Kshatriyas from North India, the eldest daughter, who had Brahmans to live with her and

changed them as often as she liked, continued the line. According to Wilks (Southern India, I. 54) the Totiers of Madura, like the Jats of the Panjab, when poor, have one wife for several brothers. In Malabar, besides among the Nairs, who furnish the best example of a polyandrous society in India, polyandry is prevalent among the Kshatris (Buchanan, II. 350) and the Shanars or palm-tappers (Ditto, 417). In places where polyandry has ceased, among certain tribes polyandrous customs linger. Among certain Upper India tribes the rule prevails that the widow marries the dead husband's younger brother, and this rule is followed in the Bombay Presidency by the Ahirs and Kathis of Kathiawar and by the Sikalgars or armourers of Dharwar. In Dharwar also among the Holayas, a depressed class, one daughter sometimes remains unmarried, inherits her parent's property, and has her children received into caste. Polyandry it found in many parts of the world besides in India. So widespread is it that McLellan, one of the leading authorities on the subject of Primitive Marriage, holds that all nations have passed through a polyandrous stage. Mr. Herbert Spencer (Prin. of Soc. I. 679), while admitting the wide spread of the practice, prefers to hold polyandry a peculiar phase of the marriagerelation rather than a stage through which all the higher races have passed. In either case several facts in Indian history and custom show that many classes which are now monogamous or polygamous have like the British passed through polyandry. Of polyandry in Indian history there is besides the well-known case of Draupadi, the wife of the five Pandav brothers, the case of the Vedic deities the Ashvins or Ashvini Kumars who had only one wife among them, of Madhavi the daughter of Yayati who had four husbands, and of another holyman's daughter who had ten. (Dabistan, II. 68). In another passage the author of the Dabistan (I. 117) seems to have thought it was the rule that in ancient India several men married one woman.

In a polyandrous people the maternal uncle holds the position which in a people among whom succession passes through the male and not through the female belongs to the father. Races and people among whom the maternal uncle holds a position of special honour may therefore be judged to have passed through a polyandrous stage. According to Ward (Views of the Hindus, I. 150) no Hindu may offer his maternal uncle in sacrifice. Inquiry shows that in many monogamous or polygamous castes in the leading family rites, first shaving or hair-cutting, thread-girding, marriage and death, the maternal uncle holds the position which in a community among whom succession had always been through the male would be held by the father of the child. In the Bombay Deccan and Karnatak among five castes the maternal uncle holds a special position at first hair-cutting

or shaving. In three of these five castes the Havig Brahmans of North Kanara, the Ghisadis or tinkers of Poona, and the Poona Velalis, a Madras caste, when a child has its head shaved or its hair cut for the first time it is set on its maternal uncle's knee. The Halalkhors or scavengers of Poona, a North Indian tribe, when they first clip the child's hair also clip the maternal uncle's hair and make him a present, and the Kilikayats, a wandering Telugu tribe in Bijapur, have the child's hair cut by its maternal uncle before it is three months old. Among three castes the maternal uncle holds a special position at the thread-girding. Among the Havig Brahmans of North Kanara the maternal uncle becomes a guide and protector of the boy in his mock journey to Benares; at his thread-girding the Chitpavan boy is shaved sitting on his uncle's knee; and among the Shenvis of Poona the maternal uncle advises the boy to give up a recluse life. Among sixteen Bombay castes the maternal uncle holds a special position at marriages. Of the sixteen castes three are high, seven middle, and six low or early. Of the high castes Chitpavan Brahmans call at the uncle's house on their way back from showing the child to the village god. Shenvi maternal uncles lift the bride from the marriage altar and set her on a heap of rice and at the lucky moment the maternal uncle brings the bride's marriage dress and ties on the wedding coronet and the wedding wristlet. Among Poona Govardhan or bastard Brahmans the maternal uncles carry the boy and girl on their shoulders and dance. Of the middle classes Patane Prabhus, Panch Kalshis and Sonars, maternal uncles, like Shenvi maternal uncles, lift the bride from the marriage altar, set her on a heap of rice, and, at the lucky moment, bring the bride's marriage dress and tie on the wedding coronet or bashing and the wedding wristlet or kankan. The Raddi maternal uncle, a Telugu class found in Poona, carries the girl to the bridegroom's house on his back; the Bangars, southern spice-sellers in Poona, make the maternal uncles stand behind the boy and girl when the marriage is going on; the Jain Shimpis of Ahmadnagar have the same custom; the Khandesh Kunbi maternal uncle clasps the hands of the bridegroom over the hands of the bride. Among low and early tribes the Halepaik maternal uncle in Dharwar goes with the boy and girl round the marriage shed; the Korvis or Sanadi Korvis of Bijapur divide the sum paid by the boy's father equally between the girl's father and her maternal uncle; in Ahmadnagar the Mochi or cobbler maternal uncles take the boy and the girl on their shoulders and dance in a circle throwing redpowder; in Bijapur the Pangul maternal uncle draws ash marks on the brows of the boy and girl; among the Ramoshis the typical early tribe of the South Bombay Deccan at the kanyadan or bride-giving, the priest asks ' Is the bride to be given?' Her maternal uncle comes forward and says 'Yes, she is to be given.'

The boy and girl are called. The boy's toes are put in a metal plate; water is poured over them and sipped by the uncle who says ' I have given you my sister's child. She is now in your keeping, see you guard her.' At their weddings the Uchlas or pick-pockets of Poona, a tribe with Telugu ways, give the girl's maternal uncle £5 (Rs. 50). In the funeral rites of the Khandesh Dang and Akrani Bhils the son of the dead man's sister receives the chief mourners turban, and the Pavras, another early Khandesh tribe, present the dead man's cow, money, and shoes to his sister's son. Outside of Bombay in shaving the young child the Yanadis of North Arkot make the maternal uncle cut off' a lock of hair from the child's head and tie it to an areca or betel palm: so the Irul maternal uncle, also in North Arcot (Cox's Stat. Account, 301) cuts a lock of hair and ties it to a ragi tree. In marriage among the Kois of the lower Godavari (Jour. Roy. As. Soc. XII. 421) the mother's brother, and not the father or the mother, settles who the child is to marry. In death among the Gurvas, an early Bengal tribe (Dalton, 63), the sister's son is the chief mourner. Among the palm-tapping Bilnars of Mysore a man's eldest sister's son succeeds him (Buchanan's Mysore, III. 52); succession also goes to the sister's son among the upper and middle classes of Jains, Buntars, Massudis, and Parivaradus of South Kanara (Buchanan's Mysore, III. 17). In Connection with the view that children were heirs to their maternal uncles before they were heirs to their fathers the use of uncle as a term of respect is worthy of note. In the Konkan among the middle and lower classes an elder stranger is addressed not as dada or father but as mama or maternal uncle. It is interesting to note that King Lear addresses the fool as uncle which is perhaps a trace of the early polyandrous British form of respectful address. In Gujarat where the good or quardian deities are fathers and mothers the hostile or earlier spirits or bhuts are addressed as uncles. Sir John Lubbock has suggested that the special respect shown in many parts of the world to dancing girls and female temple servants has its origin in the feeling that the wives of the community, that is those women who keep to the old fore-marriage customs, are worthy of special respect. At one time, says the author of the Dabistan (II. 154), dancing girls were so highly respected in India that they were called *devkanyas* or daughters of the gods. The Bombay Presidency furnishes several examples of respect shown to dancing girls and temple women. Dancing girls hold a position of special honour in Kanara Dharwar and other southern districts of Bombay. They take a leading part not only in the temple service and in temple festivals but in marriage and other family ceremonies. In Kanara almost every wedding procession of Any importance is headed by a group of dancing girls. The Kalavants or Naikins of Kanara are much honoured. They trace their origin to the

heavenly nymphs whose office was to entertain the gods and to lead astray the seers or rishis, when their penance had amassed a store of merit dangerous to the gods. These Kalavants or dancing girls have certain hereditary rights in Kanara as beginning dances in certain temples and receiving betel leaf cigars from their own people in marriage and puberty ceremonies. The Devlis or temple attendants of Kanara sweep and cowdung the floor of the temples and wave a flywhisk before the idols. The Patradavarus or high caste courtezans of Dharwar are treated with honour. They are allowed into all temples and into all houses and are considered wedded women who can never become widows. The Dharwar Lingayats have a female attendant or Basavi, the wife of the god Basav or bull, who attends religious meetings holding a brass cup and helps in calling guests. Further north Khandoba, the guardian of the Deccan, has his *murlis* but they are not held in any special respect. Beyond Bombay limits in Tulava or South Kanara (Buchanan's Mysore, III. 65, 95) the Moylars or temple women are held in great honour. Any woman of the four castes, Brahmans, Kshatriyas, Vaishyas, and Shudras, who is tired of her husband, or any widow in a caste which forbids widow marriage may go to a temple and eat some of the rice that is offered to the idol. She is then taken before the officers of government who call some people of her caste to enquire into her case. If she is a Brahman, she is offered the choice of living either in the temple or beyond its precincts. If she choose to live in the temple she is given a daily allowance of rice and a yearly suit of clothes. She is to sweep the temple, fan the idol with the Tibet cow's tail, and confine her amours to Brahmans. The Bhogams or Devadasis of North Arkot are said (Cox's North Arcot, 296) to have once been a body of vestal virgins whose duty was to sweep the temple and ornament its floor with devices in rice-Hour. After a time, according to the local story, they became immoral. They dance and sing before the idol and hold before him the sacred light or kumbharti So much respect is paid to these Bhogams in North Arkot that no marriage would be considered likely to prove happy if the bride's tali or lucky thread and clothes were not touched by a Bhogam. The common explanation of this custom is that as the Bhogams never become widows, the bride whose tali they touch will never lose her husband. One of this class is always the bride's companion or head bridesmaid and gives her hints how to secure her husband's favours by graceful movements and other blandishments (Cox's North Arcot, 296). Though, in deference to Sir John Lubbock's suggestion, the respect for temple women has been cited as perhaps a trace of polyandrous feeling, taken in connection with the object of other temple rites which seems in all cases to be spirit-scaring, the holiness or luckiness of the dancing girl or temple-woman seems to be due not to the fact that she represents the old customs which were in force before the introduction of the immoral monopoly of matrimony but because dancing, especially naked dancing, has, like King David's naked dancing before the Ark, same religious or spirit scaring power.

APPENDIX D

ORIGIN OF ORNAMENTS.

ORNAMENTS.

CHITPAVAN women, like other Maratha Brahman, women, dress their fine black hair with much care and neatness. The front hair, which is kept faultlessly smooth and glossy, has a main and two smaller partings. The main parting or bhang runs up the middle of the head to within about an inch of the crown. From the end of the main parting side partings, about two inches long, are drawn back with an outward slant from the main line so as to leave between the two side partings an angle of about 45°. The hair is drawn tightly back and is generally divided into three strands which are braided into one stout plait. [As, in Sanskrit, the word veni, plaited or woven hair,, also means the meeting of waters, Brahman women have a somewhat confused idea that the point where the three partings meet is a tri veni sangam and is typical of the famous triveni sangam, the meeting of the Jamna, Ganges, and underground Sarasvati at Prayag or Allahabad. When a Maratha Brahman woman goes with her husband on pilgrimage to Allahabad, she makes a hair gift or veni-dan by throwing into the stream the tips of her braided hair. The object is that the river may be pleased and the offerer may keep her veni, that is may not lose her husband and become a shaven-headed widow. The stout plait of hair is worn in one of two ways. Young married girls, before they come of age, occasionally wear the plait hanging down the back. At other times young unmarried women, and older married women at all times, catch back the tip of the plait, and passing it through some hair close above the root or-beginning of the plait, coil it at the back of the head, so that it forms a solid ring of hair two to three inches deep according to the quantity of hair. This circular knot or back knot is called khopa that is a nest or buchada that is a knot or knob. In shape it is thought to be a cobra with spread hood guarding the back of the wearer's head.

Both the front hair and the back plait are decked with ornaments. The ornaments worn in the front hair are, in the angle between the two side partings, a cobra or *nag* or a crescent moon called *Chandrakor*. The shape of this ornament varies. A common form is a nine-headed

gold cobra seated in the hollow of a crescent moon, with, over the cobra's head, a ring of pearl-tipped rays, and below the crescent moon a fringe of seed-like gold beads. The whole is commonly about the size of a rupee. The hollow of the crescent moon is sometimes filled with a plain plate or with some other figure than a cobra. Behind the crescent moon, almost on the crown of the head, is a lozenge-shaped plate of gold with a raised central boss. This plate, which is generally about two inches long, broadens from the pointed ends to about an inch across at the middle. It is known as the ketak (S.) or kevda (M.) that is the flower of the sweet, smelling Pandanus which is used as a medicine and whose scent scares evil. Behind the ketak, at the point where the line of the skull begins to fall, a woman ought to wear a star or chandani, ablaze with precious stones. Few women are rich enough to wear a jewelled star. In its place the usual ornament is either a gold chandani without jewels or a rakhdi apparently a quardian, a gold circle, perhaps intended for a sun, about twice as big as a rupee with a raised ornamental central boss. On each side of the nag, a little above the temples, a few women of very rich families wear two richly jewelled ornaments, surya or the sun on the right and chandra or the moon on the left. This completes the ornaments of the front hair. The ornaments, worn by married girls on special occasions in the plait which hangs down the back, differ from those worn by married women in the circular plait coiled close into the back of the head. On festive occasions a girl who wears her back hair in a falling plait decks it with nine golden, ornaments which she gets at marriage and wears on special occasions until she comes of age. These ornaments, which are strung in a silk cord and braided with the back hair into a plait ending in two red silk tassels in golden holders, are known as nag-gonde or the trinket-tassels. They are now often made of conventional spangles called flowers, the whole being known as phul-gonde or flower tassels. The trinket-tassels or *nag-gonde* differ from each other and represent certain plants and animals. The arrangement varies, but the following order is not uncommon. At the root or beginning of the plait, near the nape of the neck, the first ornament is a mud like the kolas or waterpot temple spire with a round knob in the mouth of the water-pot. Below the *mud* hang nine lucky or spirit-scaring ornaments. The first is a cobra or nag, the second a peacock or mor, the third a tortoise or kachha, the fourth a bull or nandi, the fifth a fish, the sixth a chrysanthemum or *shevti*, the seventh a cowitch pod or *kuiri* used in medicine, the eighth a lotus flower, and the ninth the lotus-loving bhunga or black bee. Below the bee the end of the braid is hidden in two red silk tassels with golden holders. Married women and girls wear three ornaments in the circular knot of hair which stands out from the back of the head. [Women and girls whose hair is scanty braid into the back plait hair called *gangavan* said to come from the tail of a *van gay* or wild cow found in Upper India, The practice of using false hair has of late become common; thirty years ago it was rare, if not unknown.] At the root of the plait there is the *mud* or water-pot spire ornament, about the middle of the circle or ring are two gold flowers, one on one side about the size of a rupee and one on the other side about the size of a shilling. Of these the rupee size flower on the outer side of the plaited ring is called *phirkiche-phul* or the screw-flower, because it is screwed into its place. At the end of the braid, which is caught back and fastened close to the head, is a conventional gold *shevti* or chrysanthemum called *agraphul* or end-flower.

The character of the articles used as hair ornaments suggests that hair ornaments were originally substances which were esteemed as spiritscarers. The moon, the sun, the sweet pandanus, the cobra, and the tortoise are all quardians. A comparison of the shapes and an inquiry into the names of the metal and gem-studded ornaments worn by high class Hindus suggests that they have their origin in the grass ornaments and in the holy fruit or holy flower ornaments of the early Hindu tribes, and, as is shown by the position which the durva and other grasses hold in the Brahman ritual, that the origin of wearing the holy grasses, fruits, and leaves, like the origin of the practice of wearing teeth and other parts of holy animals, was to keep off evil spirits. The places chosen for protection were at the chief openings by which spirits were believed to enter the body, the suture in the skull, the ears nose and mouth, the throat which the movements of the uvula seem to have suggested as the abode of one of the body's vital spirits, at the wrists and ankles where the pulse beats, and at the fingers and toes through which the spirit passed in and out.

One of the plants of spirit-scaring power, which is worn by Hindus both in its natural state and in the form of metal ornaments, is the *tulsi* or sacred basil Ocymum sanctum. This *tulsi*, chiefly apparently for its value in hysteric complaints, is with many Hindus the great guardian. A pot of *tulsi* is grown close to the house to keep evil from the doors; so every November the *tulsi* is married to Vishnu the Preserver, and a *tulsi* wood necklace is worn by Varkaris and other devotees of Vishnu. Besides in its natural form, the *tulsi* is worn in gold by Hindu women in the ornaments known as *tulsipatti* or *thushi*. Of grass the *darbha* and *durva*, worn as rings and in other ways, have a high place as evil-scarers in many Brahman rites, and rings of these grasses are known as *pavitris* or purifiers, that is sin or evil-spirit scarers. In the Konkan rice is the staple grain, the chief scarer of the bend hunger. To keep off spirits heads of rice called *bugdi* wore worn and are the origin of

the present ear ornaments of that name. The Malhari Kolis of Thana, as a cure for pimples, scratches, and other skin diseases, which they believe to be spirit-caused, wear a necklace of *gulvel* Menispermum glabrum. They also wear an armlet of the creeper called *bhutamalli* or spirit-wrestler to keep away evil, and children wear a necklace of *bajarbattu* beads to keep off the evil eye. The shreds of the holy palm tree, holy because liquor-yielding, are worn by some of the early Konkan tribes and by some of the Konkan village gods. The strip of palm leaf is the origin of the shape of one of the favourite Hindu gold bracelet patterns.

Of quardian or spirit-scaring animals a trace of the holiness of the cow remains in the Hindu women's ornament pathi literally pale red or cowcoloured. A tiger claw enclosed in gold or silver is tied round the neck of Hindu children to guard them against spirit attacks and the ivory patalis or bracelets worn by Hindu women are held to be luckier or more spirit-scaring than any metal or gem-studded ornaments. Other things which early men supposed to be lucky and have lasted into modern Hindu metal ornaments are the knot and the black bead. To it the Brahman knot or Brahma-granthi, the sacred thread, owes much of its spirit-scaring power. So among the modern metal jewelry of low class Hindus is the *ganthale* or knotted necklace and the *gantha* or knotted earring. Beads especially black beads are worn as spiritscarers by the early tribes, and the regular marriage necklace of all Hindus, the *mangalsutra* or lucky-thread, is of black beads. Other traces of original black appears in the names of gold and pearl ornaments tanmanis or life-beads and kali-ganthis black beads or black knots. It was not only, perhaps not at all, their greater beauty that made metal and gems take the place of the old spirit-scaring grass, fruit, and teeth. The metals are greater spirit-scarers than the vegetables. The ashes of iron or loha-bhasma, the ashes of copper or tamra-bhasma, and the ashes of silver or raupya-bhasma were found healing or spirit-scaring and, when heated, the metals were also spiritscaring as they cure disease by actual cautery. The holiness or spiritsearing power of copper is shown by its being put in the dead man's mouth or tied to his skirt and by its use in exorcism. So in the Konkan a barren woman wears a small copper box to keep off the evil spirit which possesses her and makes her barren. So also and still more were iron, silver, and gold spirit-scaring; and most of all had the precious stones virtues, that is spirit-scaring powers, a belief which was once universal in England and was strong at the time of Butler (1640), who made pearl-wearing a cure for one form of melancholy or bad spirits or blue devils, and still lives in the belief in the virtues of the bishop's sapphire and the baby's coral. Hindus use precious stones

to scare fiends when they bury them to scare the place-spirit, or dig them in round a *ling* to keep spirits from worrying the *ling*. On several occasions Hindus wear ornaments to keep off evil rather than for show, illustrating the rule that fear is an older passion than vanity, that most things now done for show or shobbesathi have their root in the wish to scare evil-spirits or bhutasathi. Among the Bombay Dhruva Prabhus, before he is girt with the sacred thread, the boy is decked with gold and silver ornaments and his head marked with red lines. In the Chitpavan Brahman thread-girding when the mother presents alms to her son from a ladle she puts a gold wristlet round the ladle's handle. At their wedding Chitpavans hang mango leaves and neckornaments round a pestle. The Poona Kunbis put on their children a wristlet of black beads and a neck lace of bear's hair and tiger's claws to ward off spirit-attacks. The Poona Kunbis put necklets and anklets on their cattle to keep off evil spirits (Trans. Bombay Lit. Society, III. 219). The Jain Marwaris of Ahmadnagar tie a piece of lac bangle to the bride's right foot and the boy's hand. Some Namdev Shimpis of Ahmadnagar wear a necklet of *tulsi* beads and put on the babe's neck an embossed figure of Sathvai. The Bijapur Raddis deck the drill plough with bangles and women's gold and silver ornaments. The maces or chobs carried, before the Gaikwar of Baroda are at one end ornamented with a silver bracelet and at the other end with a bell anklet. Karnatak Shrivaishnavs fasten a sacred thread round the boy's arm as well as round his neck. In Gujarat Musalman women tie black threads round their children's wrists to keep off evil spirits, and a red thread worn round the wrist is a common Deccan cure for fever. The Daudi Bohora women of Gujarat put collyrium on the eye, antimony on the teeth, and henna on the head and feet to keep off evil. According to Dubois (I. 470) in Southern India decency forbade that the ear should be without ornament. Women wore necklaces of gold and chaplets of pearls and diamonds which fell to the breast, a waistband of gold or silver, and heavy armlets. Married women wore silver toerings and many fastened above the ankles silver or gold tubes in which magic texts were written, talismans which kept them from evil (Dubois, I. 470). That earrings are worn to guard the ears against evil spirits is made probable by the fact that Hindu ascetics who give up all ornaments continue to wear copper earrings (Dubois, I. 469). The Bene-Israels scare evil by hanging a metal or cloth-box with a piece of paper written by a sorcerer round the child's neck. The Jews wore prayer signs or tephillin on the brow and arm. Taking with the washing, filling, and covering with flowers, the bell-ringing and the incense-burning, it seems probable that the original object of decking the Hindu god with ornaments was to keep evil spirits from troubling him. A few examples from other nations than the Hindus may be given

of the use of ornaments apparently not as decorations and therefore probably as evil-scarers. In Egypt the holy crocodile was adorned with crystal and gold earrings (Tiele's Egyptian Religion, 98). The people of the Andaman and Nikobar Islands use the bark of a creeper called rada as a waistband and a necklace fastener (Journal Anthrop. Inst. VII. 462). The Nikobar islanders also make necklaces of pigs' flesh and teeth (Journal Ethno. Soc. II. 138). The Motus of New Guinea pierce their ears with rings of tortoiseshells and strings of small red beads or plates of tortoise-shell ornamented with red beads (Ditto, 478). Necklaces made of small shells are worn both by Motu men and women. A necklace much worn by young women is made of pig's or dog's teeth strung together (Ditto, 478). The most common neck ornament among the Motus of New Guinea is a piece of mother-ofpearl, the shape of the moon in the first quarter (Journal Anthrop. Inst. VII. 479). The Motus also wear ornaments made of skin or some plaited material. The toe or white-shell armlet is one of the most valuable ornaments they have. It is made out of the lower segment of a conical shell and is valued because ten of these armlets is the price of a wife (Journal Anthrop. Inst. VII. 479). The Papuans of New Guinea wear in the large lappets of the ears shells, pieces of wood, and animal's teeth (Earl's Papuans, 26). The Papuans of West New Guinea wear hog's teeth in the nose, neck, arms, and waist, and bracelets of twisted cane and necklets of plaited rushes (Ditto, 48). Over the breast they wear necklaces of cord fringes (Ditto, 19). In their nose the Papuans wear a nose-stick, an ebony cylinder tipped with motherof-pearl, or part of a shell with human hair attached to it. They also wear boar's tusks in their lips to make them brave (Ingle's Australian Colonies, 33). The Caroline Islanders north of New Guinea wear fragrant flowers in the nose (Wallace's Australasia, 538). The Solomon Islanders wear nose-ornaments of various shapes and necklaces of shells (Ditto 473). The buffoons of Niam-Niam in the heart of Africa wear fantastic feathers with bits of wood and roots and the feet of earth-pigs, tortoise shells, eagle's beaks, and bird's claws (Schweinfurth's Heart of Africa, II. 30). The Bongos of the White Nile wear as ornaments bits of wood, roots, and the teeth of dogs crocodiles and jackals (Ditto, I. 296). Circular plates nearly as large as a crown piece made of quartz, ivory, or horn are worn in their lips by the Mottu women of the White Nile (Ditto, 407). The Motu chiefs wear chains of iron as thick as their lingers and necklaces of leather strong enough to bind a lion (Ditto, 412). The Dyoors of the White Nile wear rings of iron round their wrists and ankles and their women wear a great iron ring in the nose and a number of rings in their ears (Ditto, 202). Schweinfurth Bays that old Shol, the Dinka queen-of the White Nile, when she came to see him had a number of necklets of iron,

brass, and copper about her neck, also chains of iron, strips of leather, and wooden balls (Ditto, 132). Among the Niam-Niams of Central Africa dog's teeth strung together are worn across the forehead (Ditto, II. 9). The king of the Source of the White Nile used to wear a plumed hat on the top of the hair-knot. His ears were pierced with bars of copper and his body was smeared red (Schweinfurth's Heart of Africa, II. 45). Among the Dinkas of the White Nile men and women bore their "ears and put in iron rings and the women bore the upper lips and put in iron pins (Ditto, I. 152). Some West Africans wear strings of white beads, others decorate their hair with sea-shells, and others with coral (Park's Travels, I. 21). Dr. Livingstone says that a chieftainess in South Africa had a number of ornaments and medicines hung round her neck, the latter as charms (Livingstone's South Africa, 276). Women of the Sherifs of Batnel Hadgar who go naked wear leather necklets, copper armlets, and silver earrings (Burkhardt's Nubia, 46). Some East African women wear coils of brass wire round the neck and the men wear copper and brass wristlets and armlets (Stanley, I. 254). The women of some tribes in South Central Africa bore a hole in the upper lip and put tin in it (Livingstone, 597). In Loanda in South-West Africa Dr. Livingstone saw a man with a necklace of twenty or thirty charms (Ditto, 435). The Balonda women of South-West Africa, who believe in the habitual agency of spirits, wear pieces of reed in the cartilage of the nose (Livingstone, 460). The Katirs of South Africa wear bracelets, armlets, and anklets of brass and feathers in their girdles (Cunningham's South Africa, 165-167). The Wanikas of East Africa have charms on their legs, arms, neck, and hair to cure diseases and to drive oft' evil spirits (News' East Africa, 106). The American Indians wear armlets made of deer horns, hyaena's, alligator's, and boar's teeth to keep off wild beasts (Spencer's Prin. of Soc. I. 267). Solomon had a ring half brass half iron, of which all spirits stood in awe. On the Troy Crowns was an idol of the guardian goddess of Troy (Jones' Crowns, 13). The Greeks wore on their fingers the Dactyli idaci which were stones of sovereign value (Journ. Ethn. Soc. I. 44). A collar studded with jewels is worn by freemasons (Mackay's Freemasonry, 60). In Sweden till 1693 the early custom of putting the king's crown in his coffin was continued (Jones' Crowns, 23). In Spain they make an Easter king with a tin crown and a spit as a sceptre (Ditto, 17). The Celts, Germans, and Slavs worshipped horses, kept them in temples, and adorned them with earrings and anklets (Tiele's Egyptian Religion, 101). In early Christian Europe it was common to give a votive crown to the church which was hung over the altar, and in early Christian times the cross was crowned (Jones' Crowns, 13). The Anglo-Saxon king is the giver of bracelets called garters or girders (Ditto, 76). In Devonshire in 1877, a woman collected pennies till she had 4s. 6d.

With this she bought earrings and wore them to cure bad eyes (Dyer's Folklore, 152).

TATTOOING.

The original object of marking or tattooing, a practice which in later times passed into decoration or ornaments, seems to have been for luck, that is to scare spirits. The position of the tattoo marks near the eyes and on the hands, the dark colour like the spirit-scaring black, and the shapes made, the sun the tulsi and other quardian leaves and the dog and other guardian animals, all point to the same object. The frightful gashing, tattooing, and other tortures through which the Australian and many other savage youths passed when they reached manhood seem to have originally been less for looks or for a test of endurance than, like the Brahman and Persian sacred threads, as a quard against evil. The spirit-scaring power of earth and also of black yellow and red seems to be the basis of the African and other savage practices of rubbing the body with coloured earth. The practice remains in India in the ascetic's ashes or yellow earth and in the brow sect-marks of almost all Hindus. One of the chief sect-marks is red. Bed seems originally to have been the great spirit-scarer blood, the old savage drink, the driver of the fiend of fatigue. It was by smearing the door posts with blood that the Israelites kept the angel of death from entering their houses. So the Rajput chief, who like all chiefs on their crowning day, is specially open to spirit attacks, has his brow marked with blood. This has been supposed to show that the chief of Rajput race admitted that the low caste man whose blood was put on his brow had a prior claim than his own to be chief. The true explanation of this practice seems to be that a man from one of the low tribes was formerly sacrified and the chief's brow smeared with his blood to keep off the attacks of evil spirits. The proof that the red mark in the chiefs brow was a relic of human sacrifice comes from Bengal. Colonel Dalton (Ethnology of Bengal, 146) records that among the Bhinyas of Kronghir in Bengal, a family holds land on condition of furnishing a victim when a new chief succeeds. At the installation of a new chief a man rushes forward, throws himself at the chief's feet, and has his neck touched with a sword. He disappears for three days and comes back as if miraculously restored to life.

APPENDIX E

SPIRIT- POSSESSION.

[Compiled chiefly from papers on Spirit-possession received from the Assistant Surgeons and Hospital Assistants of the Deccan districts through the kindness of Surgeon-General Beatty. The most useful papers were written by Rav Saheb V. R. Ghollay, Assistant Surgeon, Poona, and Mr. S. V. Kantak, L.M., Assistant Surgeon, Pandharpur.]

IN the Deccan if a person cries or weeps incessantly, if he speaks at random, if he sways his body to and fro, if he lets his hair fall loose, if he spits blood, if he does not speak or if he refuses his food for several days, and grows day by day paler and leaner, he is believed to be possessed by a spirit. All people are liable to spirit-possession and at all times of life. Women are very liable to spirit-seizures, children are less liable than women, and men are less liable than children. Women are specially liable to spirit-seizures during their monthly sickness, in pregnancy, and in child-bed; and barren women are at all times open to spirit attacks. Infants are most liable to be attacked by spirits during the twelve days after birth, especially on the fifth and sixth days and when teething. Spirits are divided into two main classes gharche bhut or house-spirit and baherche bhut or outside spirit. The influence of the house-spirits is confined to the family to which they belong. Unless they are molested they do not trouble outsiders. They are generally the ghost of a member of the family who died with some desire unfulfilled. By some they are called samandhs or connexions, but they are usually known by the name of the deceased member of the family whose ghosts they are, and from whom they do not differ in appearance or character.

The chief outside spirits are Akhabusa, Asras, Brahmapurush, Brahmarakshas or Khavis, Chudel, Chandkai, Dankhin, Hadal, Jakhin, Lanv, Mhasoba, Mhaskoba, Munja, Najis, Navlai, Nirvanshi, Pir, Rajis, Talkhamba, Vetal, Vir, and Jhoting. Vetal is the king of spirits. His features and his body are like those of a man except that his hands and feet are turned backwards. His eves are of a tawny green, his hair stands on end, and he holds a cane in his right hand and a conch shell in his left. He lives on air. When he goes his rounds, which he generally does at midnight on no-moon and full-moon days, he wears a green dress and either sits in a palanguin or rides a horse, while some of his attendants walk before and others walk after him, holding lighted torches and calling aloud. Vetal lives in large stones covered with oil and redlead. Asras are the ghosts of young women, who, after giving birth to one or more children, committed suicide by drowning themselves. They always live in water and attack any person who comes to their place of abode at noon, in the evening, or at midnight. When they make their rounds they generally go in groups of three to

seven. Their chief objects of attack are young women. They always ask for one offering for the band of spirits, each does not ask something for herself. Their favourite offerings are cooked rice, turmeric and redpowder, and bodicecloths.' Brahmapurusha is the ghost of a married Brahman who, during his lifetime, was a miser and who died miserably, his mind intent on adding to his hoard. He lives in burning grounds, on the banks of rivers, and in the lofts of houses. When he lives in his own house he attacks any member of his family who spends his money, uses his clothes, or docs any other thing which had he been alive he would not have allowed him to do. Dankhin, also called Dakhin, is the ghost of a lonely woman, especially a widow who dies without children, relations, or friends. She haunts streetcrossings, and like Jhoting wantonly attacks children. Hadal or Hedali is the spectre of a woman who dies in pregnancy or in childbed. She dresses in a yellow robe and Bodice, wears her hair loose, and is said to be plump in front and a skeleton behind. She lives in wells, trees, or in out-of-the-way nooks and house corners. She always attacks women. In the Deccan are many stories of Hadals visiting men at night in the guise of beautiful women, and living with them for some time till their fiend nature or spectre body showed itself Lanv is a female spirit who lives in burning and burying grounds, feeding on human intestines. She often appears in the form of a cat, dog, or goat, and suddenly turns into a woman, frightening children into a swoon. Mhasoba or Mhaishasur is a male spirit, who usually lives in a red painted stone in the corner of a field. Some villagers consider him a quardian and worship him. Sometimes a villager who is Mhasoba's devotee makes him a vow that he will give him a cock or some other dainty if he will attack and sicken or kill the devotee's enemies. In this way, though otherwise harmless, to oblige a devotee Mhasoba sometimes causes sickness or death. Munja is the ghost of a threadgirt but unmarried Brahman lad. He lives in a pipal or Ficus religiosa tree. He is fond of attacking women whom he torments, pricking their eyes with thorns, scorching them with fire, or making them sick or barren. Any one who pelts his *pipal* with stones or otherwise disturbs him is sure to be attacked. To appease him those whom he attacks gird the *pipal* tree with a *munj* or sacred thread, and build a platform or par round its roots. Najis is the spectre of a Musalman who died with unfulfilled desires. When a Najis seizes a person the usual symptoms of spirit-possession are not observed. He is very difficult to drive out; Musalman exorcists alone can expel him. Pir is the ghost of a dead Musalman who lives in his tomb and seizes only those who annoy him by sitting on his tomb, spitting, or pelting stones at it, or doing any other mischief. Virs are the spirits of persons who die in battle. They are not harmful and only seize members of their family

who play the coward. In some Deccan families during the Holi holidays a family Vir is asked to come into the head of the house. The man into whom the spirit comes is fed richly, dressed in war attire, and carried in procession accompanied by friends and music to Maruti's temple. On his way to the temple he dances to music and becomes inspired. At the temple he worships the image of Maruti with flowers, redlead, oil, and frankincense, and the whole party return home. If this rite is not observed the Vir troubles his family, otherwise he acts as their guardian. Jhoting is the ghost of a man who dies unmarried leaving no relation. He seizes and annoys any one without provocation. He lives in old empty houses, burial grounds, and old pipal trees. He is the most obstinate and faithless of spirits. His promises and oaths have to be received with caution. He extorts offerings of kids, chickens, cooked rice, and clothes, which he demands at most inconvenient times, and even after getting what he asks he will come again and demand a fresh offering. Many are the pranks and tricks played by the Jhoting. He often personates absent husbands and deceives women for days together. He has walked long journeys with wayfarers, conversing with them on all topics and generally leading them to a pond or river and drowning them. He often runs alongside of post-runners and persuades them to lay down their post bags, for, so long as the runner has his bag on his back, Jhoting can do him no harm.

The life and influence of spirits last for four generations. In the Deccan the ghost of a great grandfather or mother is almost the oldest known. After three or four generations ghosts disappear and make room for new ones. In the Poona district, places which about seventy-five years ago were haunts of devils and which were carefully shunned, are now smiling gardens or the sites of beautiful buildings.

People who die an unnatural death and people who die with a wish unfulfilled, as an unmarried person or a miser who leaves his hoard behind, and a woman who dies in child-bed, monthly sickness, or pregnancy, are believed to come back as ghosts and trouble the living. To prevent ghosts of this kind from coming back and troubling the family special rites are performed. To prevent a dead person likely to become a ghost from coming back in the Deccan *rala* Panicum miliaceum grains and water are thrown after the body from the house to the burning ground. Sometimes a handful or two of the same grain is buried or burnt with the body. If the deceased is a woman who died in child-bed, grains of barley are used and an old horse-shoe or iron nails are driven into the threshold of the house that the spirit of the dead may not come back. In rare cases, among the lower classes, needles or small nails are driven into the heads of women who died in

child-bed, and in some cases the tendons of a man who has been hanged are cut to prevent the ghost from walking. The attacks of outside spirits cannot be prevented by any fixed means. They have to be appeased each time as Vetal or other guardian spirit may dictate, or as the spirits themselves may demand.

When a person is believed to be seized by a spirit, before an exorcist is called, several home-cures are tried. Incense is burnt and the head of the person is held over it, or eggs and lime are waved round his face and thrown on the road. If a vow has been made to any spirit or deity the vow is fulfilled and a fresh vow is made, to the household or the village god. If all these means fail the relations of the patient consult an exorcist, who gives them angara or charmed ashes to be rubbed on the patient's body or tolls them to perform some other rites. The exorcists in the Deccan are called bhagats or devotees, devrishis or divine seers, mantris or enchanters, and panchaksharis or men of five letters. They belong to all classes of Hindus and Musalmans, but they are generally recruited from the lower classes. Exorcists may be. divided into two classes, professional and non-professional. Nonprofessional exorcists are for the most part persons who get naturally inspired by a guardian spirit or dev, or who have been favoured with a mystic spell or incantation by a fakir, sadhu, or saint. Most professional exorcists learn the art of exorcism from a guru or teacher, as it is believed that anything that is learnt without a guru's help proves unavailing. Deccan Hindus have various ways of learning exorcism. The following are the most common: The first study is begun on a lunar or on a solar eclipse day. On such a day the teacher, after bathing and without wiping his body or his head hair, puts on dry clothes and goes to the village Maruti's temple. The candidate having done the same also goes to the temple. He spreads a white cloth before the god, and on one side of the cloth makes a heap of rice, and on another side a heap of *udid* Phaseolus radiatus, sprinkles redlead on the heaps, and breaks a cocoanut in front of the idol. The teacher tells him the mantra or incantation and he learns it by heart. An ochrecoloured Hag is tied to a pole in front of the temple and the teacher and the candidate, return home. After this, on the first new-moon which falls on a Saturday, the teacher and the candidate go together out of the village to a place previously marked out by them on the boundary of the village. A servant accompanies them, who takes in a bag udid or Phaseolus radiatus, oil, seven earthen lamps, lemons, cocoanuts, and redpowder. When they reach the spot the teacher and the candidate bathe and the teacher goes to the temple of Maruti and sits praying to the god for the safety of the candidate. The candidate, who has been told what to do, starts for the boundary of the next

village accompanied by the servant On reaching the village boundary he picks up seven pebbles, sets them in a line on the road, and, after lighting a lamp near them, worships them with flowers, red-powder, and udid beans. Incense is burnt and a cocoanut is broken near the pebbles which represent Vetal and his lieutenants, and a second cocoanut is broken for the village Maruti. When this is over he goes to a river, well, or other watering place, bathes, and without wiping his body or putting on dry clothes, walks to the boundary or ves of the next village. There he repeats what he did at the first village boundary. He then goes to the boundary of a third village, and in this way goes to seven villages repeating the same ceremony at each. All the while he keeps muttering charms. After finishing his worship at the seventh village the candidate returns to his own village, and going to the temple of Maruti, visits his teacher and tells him what he has done. In this way by worshipping and pleasing the Vetals of seven villages he becomes a devrishi or exorcist. After learning to exorcise he has to keep certain rules, a slight breach of which destroys his power as an exorcist. On every solar eclipse he must go to the sea-shore or to a river bank, bathe in cold water, and, while standing in the water, repeat incantations a certain number of times. Daily after bathing he must neither wring his hair nor dry his body. While he is taking his meals he should leave off eating, if he hears a woman in her monthly sickness speak or if a lamp goes out. The Musalman methods of learning exorcism are different from the Hindu methods and are rarely studied by Hindus. One of them may be mentioned. The candidate begins his study under the guidance of his teacher or ustad on the last day of the lunar month provided it falls on a Tuesday or a Sunday. The initiation takes place in a room whose walls and floors have been plastered with mud and daubed with sandal-paste. On the floor a white sheet is spread and the candidate, after washing his hands and feet and putting on a new waistcloth or turban, sits on the sheet. He lights One or two incense-sticks and offers a white cloth and meat to one of the leading Musalman saints, as Barhena, Hatila, Mehebat, or Sulaiman. The ustad or master teaches the candidate spells which are generally passages from the Kuran. As the course of studies which a Hindu exorcist follows differs in many points from those followed by Musalman exorcists so the plans and procedure adopted by the Hindu exorcists to scare spirits differ much from those adopted by Musalmans. Eleven modes of scaring spirits are commonly practised by Deccan Hindu exorcists. 1. Limes or lemons, which have been held over the fumes of burning incense and charmed by repeating incantations over them, are kept under the pillow of the person affected. 2. Charmed ashes, healing herbs, and a paper, written with the names of some Hindu gods, of the patient and his mother, and

some mysterious words are put in a small copper or silver box, tied round the patient's neck or arm. 3. Charmed ashes are rubbed on the patient's brow. 4. A ruffle-feathered fowl and less commonly a goat or sheep is waved round the patient, carried to a place named by the exorcist, and slaughtered. 5. Cooked rice and flesh, curds, eggs, cocoanuts, flowers, and redpowder are put in a bamboo basket, waved round the sufferer and laid at the crossing of four roads, 6. The exorcist takes a few grains of *udid or* Phaseolus radiatus, charms them, and throws them on the sufferer's body. 7. When the patient is possessed by an Asra or Satvai or other quardian spirit, a red and yellow cotton thread called *nadapudi* is charmed, fumigated with incense and tied round the sufferer's arm. 8. Some exorcists by the power of their charms cause the spirit to come out of the body of the possessed and enter a bottle which the exorcist corks and buries head down in some lonely place. 9. Some exorcists draw a figure and write mysterious words on a leaf of the bhurj or Indian birch tree, dissolve the leaf in water, and give the water to the possessed person to drink. 10. In some cases the exorcist takes the possessed person to a large tree, pronounces some mysterious words which force the spirit into the tree, and fix it there by driving a nail into the tree. 11. When a person is seized by a Brahman spirit Brahmans are fed and presented with money, and, when a person is seized by Vetal, boiled rice, curds, lime, cocoanuts, betelnuts and leaves, a cane, a garland of rui Calotropis gigantea flowers, camphor, incense, cocoanuts, and sometimes a goat are offered at Vetal's stone, which is anointed with oil and redlead, and some hemp water and leaves and some tobacco are left for Bhangyabuva, Vetal's doorkeeper.

The Musalman devices for scaring spirits are fewer and simpler than the Hindu devices. The following are the chief: 1. The name of Allah, the patient's name and his mother's name, and some spells are written on paper, put in a copper or silver box of nine or sixteen compartments, and tied round the sufferer's arm or neck. 2. Spells or verses from the Kuran are written on a paper which is curled into a wick and burnt, the sufferers' head being held over the fumes. 3. The red and yellow cotton thread called *nadapudi* is charmed, held over a pot of burning incense and tied round the sufferer's arm or neck. 4. The exorcist reads passages from the Kuran and blows on the possessed person. 5. The name of Allah is written on paper, bark, brass, or on a knife blade, the article written on is washed, and the sufferer drinks the water.

Though some classes of spirits are affected by both, the Hindu modes of exorcism have more effect on Hindu spirits and the Musalman modes on Musalman spirits.

The following examples illustrate cases of spirit-possession and the modes adopted for driving out the possessing spirits. (1) Radha the second wife of Narayan, a Konkanasth Brahman of Poona, one day on coming home after drawing water began to cry, to shake, and to vomit.' From these symptoms her husband guessed she was possessed. He burnt incense and hair and held her head over the fumes, and struck her with a cane, but the spirit would not go. Narayan sent for Raghu a Maratha exorcist. Raghu asked for some incense, fire, and lemons. He waved the lemons round the girl, cut them in pieces, and, putting the incense on the fire, set it before the girl and began to mutter charms. After he had spoken few words the girl came forward and sat in front of him. Raghu asked her to say who the spirit was. The girl, answering in the spirit's name, said that she was Narayan's first wife, and that she attacked Radha because she had taken her place and used her things. The exorcist called on her to leave the girl. She answered that she would leave if Radha wore round her neck a golden image of her, and presented women with robes and bodices in her name. The golden image was worn and women were given robes and bodices but Radha did not get well. Then the exorcist asked the spirit of the first wife whether any other spirit troubled the girl. After much hesitation she admitted that besides herself a male spirit possessed the girl. The dead wife was asked to leave the girl till the male spirit was driven out. When the spirit of the dead wife had gone, the exorcist burnt more incense and repeated verses. He threw water over Radha, slapped her on the face, and cut lemons on her head. Radha, or the man-spirit in her, began to. speak. He said he was the son of the village accountant of Karad in Satara, and that as he had failed to get Radha as his wife he attacked her during her last visit to Karad, where she had gone to visit' her grandmother. In proof that his statement was true he was asked to write all about himself. This he did though Radha is said not to know how to write. He was told to go, but refused. The exorcist began to throw water over Radha, and to repeat charms. He cut several lemons, squeezed them over her head, and after a while the spirit agreed to leave. The girl was carried to a distance from the town, and there the spirit was nailed into a tree. Before he was nailed he was asked whether any more spirits were in the girl. He said there were five more. The girl was then taken to Pandharpur along with the exorcist. On holding her head over incense fumes the exorcist found that the five spirits were two Maratha women, one Kunbi man, one Munja or thread-girt lad, and one

drowned Brahman. The two Maratha women said they attacked Radha because she happened to come in their way one day while walking along the road. They were easily removed, and were not nailed into the tree, as they promised not to trouble her. The Kunbi man said that Radha had crossed his path in his field and he attacked her. He said that he had become a ghost because he died from the effects of snake-bite, and prayed that he might not be nailed into a tree out be allowed to go to his native country. The exorcist saw no reason to humour the Kunbi, and nailed him into a tree. The Brahman man had no reason to give to explain his attack on the girl, but as he promised never to molest Radha again he was allowed to go. The next spirit was the Munja or Brahman lad. On being asked to leave he refused. The exorcist threw several handfuls of water over the girl and repeated charms until the Munja agreed to go, and was nailed into a pipal tree. The exorcist then wrote some mystic spells on a piece of paper, enclosed it in a silver box, and after tying the box round Radha's neck sent her back to Poona. (2) Kashi, the daughter of Narayan, an oilmaker of Poona, one day threw some bones near a *pipal* tree in which a Munja lived. One Rupchand Daulata told the girl's father, and advised him to prevent his daughter polluting the Munja's abode. Instead of reprimanding his daughter Narayan abused the Munja. One day about nine in the morning a shower of stones and broken tiles fell on Narayan's roof So great was the shower that many people came to see it. One of the spectators, who was a medium, told Narayan to bring an egg and fire. No sooner had he said this than thirty or forty eggs and some live coals fell from the ceiling. On this some one suggested that cow's urine should be brought and sprinkled over the house, when suddenly a large quantity of water fell from the ceiling. The owner of the house began to despair, when suddenly pieces of silver anklets fell from the ceiling. Those present cheered Narayan and said the anklets were lucky. Narayan thought the pieces of anklets were his own and asked his wife to see whether her anklets were safe in the box. She opened the box and found the anklets missing. All the links were gathered and were found to make up the missing anklets. The same evening the oil-maker's daughter became inspired, and an exorcist was called. He threw charmed grains of *udid* Phaseolus radiatus over the girl, and called on the spirit to go. After some hesitation the spirit agreed to go, provided the oil-maker cleansed the platform of the pipal tree where he lived, gave him cooked food and flowers, and fed five Brahmans in his name. All this was done and the spirit ceased to give trouble. [This case is said to have happened at Poona. about four years ago and is corroborated by several persons, Ray Saheb V. R. Ghollay, Assistant Surgeon, Poona. (3) Esu, a Maratha woman, during her monthly sickness, went to the river Mula

to wash her clothes. She began to wash her clothes when the stone on which she was standing upset, and she fell in water. She got up, washed her clothes, and went home. In the evening she began to shake and cry. She refused to eat, and continued in this state for a fortnight. Her husband called an exorcist who gave her some ashes to rub on her brow and promised that for a fortnight she would be untroubled. Accordingly she was well for a fortnight. At the end of the fortnight the exorcist came. He asked for seven pomegranates, seven almonds, seven dry dates, seven lemons, a cocoanut, a sheep, a piece of green cloth, redpowder, turmeric, incense, camphor, flowers, and a cotton thread dyed black, yellow, and red. The exorcist then took Esu with her relations to a field near the river. There he brought seven pebbles, washed them with water and anointed them with oil and redlead, burnt incense and camphor, and killed a sheep before them. A bamboo basket was filled with cooked rice and the sheep's flesh, a flour-lamp was lighted and kept over the rice, the piece of cloth, cocoanut, and other articles were kept in the basket and the basket was floated down the river. No medicine was given to Esu, and after a few days she was well.

It sometimes happens that even the best exorcists fail to cast out the spirit. In such cases the patient is taken to one or other of the following places: Narsoba's *vadi* in Kolhapur, Alandi and Narsingpur in Poona, Phaltan in Satara, and Gangapur near Sholapur. At Narsoba's vadi is a famous spirit-scaring image of Guru Dattatraya the threeheaded god. The possessed person is told to worship the idol daily and to go round the temple three to a thousand times. At the time of arti or lamp-waving a lighted lamp is waved round the god and drums beaten and cymbals clashed. The possessed person becomes inspired, and cries 'Do not beat me: I will depart.' The spirit, through the medium of the possessed person, promises to go if it is given what it wants. Some spirits demand the money which the possessed person owes them, some demand food, and some other offerings. When the demands of the spirit are satisfied, the possessed person throws himself into water. His relations, who accompany him, instantly take him out of the water, and when he is taken out he is well. At Phaltan in Satara, is a temple belonging to the class of religious beggars called Manbhays. [Details of Manbhays are given in the Satara Statistical Account, 120-122. The temple contains a samadh or tomb of a saint named Aba Saheb. At the time of arti or lamp-waving round the tomb the possessed person gets inspired and cries out ' Do not beat me. One of the Manbhay ministrants calls on the spirit to leave the person and stay in a tree or a stone pillar in the temple yard. In the trees in the yard are many nails, each nail representing a spirit who has been

fixed into the tree. In the Deccan the belief in the frequency of spirit-attacks is strong, though not so strong as in the Konkan. Among the lower classes the belief is universal, and it is by no means uncommon among the higher classes, especially among women. The only persons who profess not to believe in spirit-possession are Kabir-panthis or followers of Kabir, the Nanak-panthis or followers of Nanak, the Ramanuj-panthis or followers of Ramanuj, and the Pandharpur Varkaris or devotees of Vithoba. Lingayats also profess not to believe in spirit-seizure, but in practice consult exorcists as often as other Hindus. It is universally stated that the belief in spirit-seizures is not so strong as it was some fifty years ago, and that day by day it is growing weaker.

APPENDIX F

UNDER special circumstances one or two peculiar forms of marriage and funeral service are performed:

SUN-MARRIAGE.

Arka-vivaha, literally sun-marriage, is the phrase used for marriage with the holy *rui* bush Calatropis gigantea in which the sun is believed to live. When a man has lost two wives it is the general belief that if he marries a third wife either he or his bride will die soon after the wedding. The evil is turned aside by the man marrying the sun's daughter the rui bush before he marries his third wife. The rui bush marriage is performed either in the house or near a rui bush on a Saturday or Sunday when the constellation Hasta is in the ascendancy, or a couple of days before the marriage with the third wife. The bush should have fruit, flowers, and leaves. A square is traced in front of the bush with lines of quartz-powder, and the bridegroom sits on a low wooden stool in the square facing the bush. The family priest sits on another low wooden stool to the bridegroom's right as also does the father of the girl whom the bridegroom is afterwards to marry. The bridegroom pours water on the palm of his right hand, and throws it on the ground saying, I make a sun-marriage to turn aside the evil which might fall on me if I married a third time.' Then, as at other marriages, come the holyday-blessing or punyahavachan and joyfulevent spirit-worship or *nandishraddh*. The girl's father performs the madhupark or worships his son-in-law by offering him clothes, rubs sandal-paste on his brow, throws flower garlands round his neck, and with joined hands, looking towards the rui bush and calling on the bush as the sun-daughter, begs her to show favour to his daughter and her husband and to overlook his son-in-law's sin in marrying a

third time. The girl's father pours a little water over the bush, rolls a white sheet round it, winds a cotton thread round the sheet, and lays a betel packet and raw sugar before it. The bridegroom, standing with joined hands in front of the bush, prays, saying 'Thou who art chief among trees, in whom lives the sun-god Surya-Narayan, who art a Brahman loved by the gods, do thou guard with care the girl I am about to wed and be kind to us both.' The girl's father and the priest hold a cloth or antarpat between the bush and the bridegroom and as far as the girl-giving or kanyadan, the service is almost the same as at an ordinary Brahman marriage. The only difference is that instead of the girl's father's name the name of Surva or the sun is repeated. A thread is passed four times round the bridegroom's waist and the stem of the bush, and a second thread is wound four times round his neck and the branches of the bush. The thread which was passed round the bridegroom's neck and the branches is tied to the bush with a piece of turmeric, and the thread that was passed round the bridegroom's waist and the bush-stem is tied to the bridegroom's right wrist also with a piece of turmeric. Four waterpots are set round the plant and on each pot an image of the god Vishnu is placed and worshipped by the bridegroom. The bridegroom then sits on the left of the plant, kindles a sacrificial fire, and feeds the fire with butter. The priest repeats the shanti sukt or peace-bringing verses. The bridegroom leaves his place and puts on new clothes which are given him by the girl's father, and the clothes he wore during the ceremony are made over to the priest along with a money present. Brahmans are feasted and on leaving are presented with money or dakshana The root of this sun or rui bush marriage seems to be the fear of the ghost of the dead wife. In the lower Deccan and Konkan classes who allow widow-marriage the fear of the dead husband leads to similar special services before widow marriage. The fear of the husband's ghost seems to be at the root of the Hindu high caste rule against widow marriage.]

FUNERAL RITES.

Special funeral services are performed for an unmarried lad, for a woman who dies in her monthly sickness, for a pregnant woman, for a lying-in woman, for a heirless man, for a child under three, and for an ascetic. When a *Brahmachari* or Brahman lad dies after he has been girt with the sacred thread and before the *sod-munj* or loosening of the *munj* grass waistband, or according to others between the time he is girt with the sacred thread and his marriage, there is no mourning. The body is laid in the women's hall. The father sits on the ground near the body and performs the *punyahavachan* or holyday-blessing and *nandishraddha* or joyful-event spirit-worship. An earthen mound is

raised near the body and the father kindles a holy fire on the mound and feeds the fire with butter. He loosens the patch of deer skin and the munigrass from the dead loins and casts them outside of the house. If the ceremony is performed in the house, to prevent weeping and wailing, preparations are at once made for carrying the body to the burning ground. A bier is made ready and the body is taken outside and laid on the bier. The bier is raised on the shoulders of four of the nearest relations and they start for the burning ground, the father walking in front holding an earthen firepot. At the burningground the whole of the sun-marriage or arka-vivaha is gone through. The root of this sun marriage is the fear of the unwed ghost. In the Kanarese districts no spirit is more feared than the vir or ghost of the unwed. He belongs to the class of uneasy ghosts who walk and worry the living, because they die with one of the great objects of life unfulfilled. Among the Malabar Nairs the fear of the unwed takes the curious and costly form of marrying the Nair woman's corpse to a Brahman.] A twig of the *rui* or Calotropis gigantea is brought and the twig and the body are bathed, rubbed with turmeric, a yellow thread is passed round them, and each is dressed in a piece of white cloth. An earthen mound is raised and a holy fire is kindled and fed with butter. The father of the boy now becomes impure and from this moment the mourning begins. The body of the boy is burnt with the same observances as at the death of a married man. The only difference is that on the thirteenth day thirty Brahmacharis, or boys who have been girt with the sacred thread but are not married, are asked to the house of mourning and presented with loincloths or langotis, deer skins, earrings, shoes, umbrellas, balls of gopichandan or white clay, flower garlands, sacred threads, money, and coral.

When a woman dies in her monthly sickness, her body is carried out and burnt without any ceremony or the repeating of any verses. On the fourth day the bones are gathered and burnt again with the same ceremonies as if the bones were the body. If the family objects to dispose of the body in this way, the body is carried to the burning-ground as usual, laid near water, and covered from head to foot with dough. The chief mourner bathes, and, with a new winnowing fan, scoops water a hundred and eight times from the pool so as to dash on the body and wash off the dough. He then mixes ashes with water and pours it over the dead, then cowdung and water, then earth and water, then darbha grass and water, and lastly the five cow-gifts and water. The body is dressed in a new robe, the old robe is cast away, and the body is burnt with the usual ceremonies.

When a woman dies after the sixth month in pregnancy she is bathed and decked with flowers and ornaments, and then carried to the burning-ground. There her husband or son sprinkles water on her body from the points of darbh or sacred grass, and says sacred verses. Then he cuts with a sharp weapon, generally a razor, her left side below the navel and takes out the child. Should the child be alive, it is brought home and taken care of, but should it be found to be dead, it is there and then buried. Then the belly of the dead woman is filled with curds and clarified butter, and covered with cotton threads, and is burnt with the usual rites. Of late the practice of cutting the stomach and taking out the child whether dead or alive is not much regarded, especially in cases in which pregnancy is not far advanced and the hope of taking out the child alive is little. If a pregnant woman is burnt with her child in the womb, the chief mourner of the pregnant woman is said to commit murder and to avoid the sin of murder the chief mourner must perform cleansing rites.

When a lying-in woman dies during the first ten days, her body is carried out and burnt without any ceremony or the repeating of any verses. If the family objects to dispose of the body in this way, the body is covered from head to foot with dough of barley, and, like the dead body of a woman in monthly sickness, is washed with water, ashwater, cowdung water, earth water, darbh grass water, and lastly with water and the five cow-gifts. The old robe is thrown away and the dead body is wrapped in a new robe, and burnt.

When a child dies within the first twelve days or before the naming ceremony, it is always buried; and if it dies between the twelfth day and the third year or between the naming ceremony and the first cutting of the child's head hair it is either buried or burnt without any ceremony or the repeating of any verses. If a boy dies after the naming ceremony and before teething and if the body is burnt his parents are impure for three days and other members of the family for one day; and when the body is buried the parents become pure after three days and other members of the family by bathing. If a girl dies after the naming ceremony and before teething, her parents are impure for three days and other members of the family become pure on the first day by bathing whether the body is burnt or buried. If a boy or girl dies after teething within the third year or before the cutting of the head hair, the parents are impure for three days and other members of the family for one day, whether the body is burnt or buried.

When a heirless person dies, any of his castemen out of charity burn the dead body and perform the usual death rites. To perform the death-rites of a helpless and heirless man is considered highly meritorious. If none of his castemen is willing to do the rites or to burn the dead body, Hindus of any caste except the impure castes may burn the body without any ceremony.

When a sanyasi or ascetic dies his funeral ceremonies are performed either by his disciple or shishya, or by his son if he has a son. The son's, or, if the son is absent, the disciple's head is shaved except the top-knot and his face except the eyebrows. If the sanyasi has no son his disciple cannot shave his head and face. The chief mourner pours cold water over the body and covers it with sandal-paste. Flower and tulsi garlands are fastened round the neck and arms and the body is seated cross-legged in a bamboo frame, scented powder is thrown over the body, and flowers and burning frankingense sticks are stuck round the frame, and with musicians friends relations and townspeople the body is carried at a slow pace to the burning-ground. Here a pit is dug about five and a half feet square and deep, and in the bottom of the pit is dug a second hole about two feet three inches square and deep. The five cow-gifts or panchagavya are sprinkled over both the pit and the hole and blades of darbha grass are laid at the bottom both of the pit and of the hole. Over the dead head the chief mourner sprinkles water from a conch-shell and worships the dead, offering flowers and burning incense. The body is seated cross-legged in the hole, a stick or dand with three crooks or vanks is placed in his right hand, and the chief mourner lays his right hand on the dead breast, eyebrows, and head. Then, as the skull of the dead must be broken, it is struck with a conch-shell or with a hatchet If, either through fear or through love the mourner is unwilling to break the skull, a lump of coarse sugar is laid on the head, and the coarse sugar is broken with a conch-shell Then the pit and the hole are filled with salt and covered with earth and stones. The burial of an ascetic is believed to give merit not only to the chief mourner but to all who attend. There is no weeping and no mourning. When the burial is over all are careful to bathe and rub sandal-paste on their brows and return with joy to the mourner's house. No mourning rites are performed, but for ten days the chief mourner does not defile himself by touching any one or by talking with a Shudra. Either on the same or on the following day he washes the house-gods, gathers the water in a pot, and four times pours a ladle of water on the ground in the names of Gurudev, Parama-gurudey, Paramesthidey, and Paratparagurudey, as if four generations of spiritual fathers. Then, if the death happened in the first fortnight of the month, the first twelve of the twenty-four names of the

deities are repeated, and, if the death happened in the second fortnight, the second twelve names are repeated by the mourner, and after each name a ladle of water is spilt On the ground. [The gods twenty-four names are: Keshav, Narayan, Madhav, Govind, Vishnu, Madhusudan, Trivikaram, Vaman, Shridhar, Rishikesha, Padmanabh, Damodar, Sankarshan, Vasudev, Pradyumna, Aniruddha, Purushottam, Adhokshaja, Narasimh, Achyut, Janardan, Upendra, Hari, and Shrikrishna. For ten days the mourner goes daily to the burningground, cooks rice in milk and butter, and after making on the grave a sand or earth *ling* and worshipping it, offers the rice and butter to the ling, and then throws it into water and returns home. On the eleventh day he goes to the burning-ground, and sitting near the grave or near a pool of water, repeats the name and the family name of the dead, and says, 'I perform the ceremony of joining the dead with his dead fathers, his father, grandfather, and great-grandfather. He asks five Brahmans to sit near him, and goes through the shraddha or memorial service, except that he offers no rice or dough balls or finds. On returning home he feasts the five Brahmans and dismisses them with a money present. On the twelfth day he performs the Narayanbali or god-offering. He asks thirteen Brahmans to a feast. He seats them in a row on thirteen low wooden stools, repeats one of the god's twelve names, and places a blade of darbha grass in the right hand of each of the twelve Brahmans. The thirteen Brahmans he takes to be the god Vishnu. He places a blade of darbha, grass in his right hand and in a metal plate near him sets an image of the god Vishnu. He washes the feet of the thirteen Brahmans, and sitting with his face to the east makes a mound of earth, lights a holy fire on the top of the mound, and puts in a brass pot a hundred and fifty-two pinches of rice, washes the rice in cold water, and mixing it with butter and milk cooks it on the mound. When the rice is cooked he throws some of it thirty-two times on the fire. He presents the Brahmans with woollen beds or asans and waistcloths or achhadans. Buttered leaf plates are laid before them and dishes cooked in the house are served on the plates. After they have dined the Brahmans go out, wash their hands and mouths, and again take their seats on the low wooden stools. The mourner makes thirteen balls of the rice that remains and places them in a row before him and worships them in the name of Vishnu and of twelve of the twenty-four names of the gods. Packets of betel and money are given to the thirteen Brahmans and they withdraw. The family priest receives some money, the image of Vishnu, and the plate in which the image was set and goes home, and the ceremony of Narayanbali or god-offering is over. On the thirteenth day sixteen Brahmans or sanyasis are asked to dine. When they come they are seated in a row on low wooden stools. The mourner washes their feet

in a plate and gathers the water in a jar. The sixteen men are worshipped as house-gods are worshipped, and, after the worship is over, leaf plates are spread and sweetmeats are served. When the dinner is over they take their former seats and are given water jars, shoes, waist-cloths, money, and betel packets. A high wooden stool is set near them, and on the middle of the stool some grains of rice are strewn, and on the rice a water jar is set. The chief mourner worships the water jar in the way he worships his house-gods. He sets the jar on his head, and followed by his brothers, sisters, and other members of the family, walks once round the Brahmans. The Brahmans shout verses and the chief mourner dances with the jar on his head, so as to make the water from the jar spill over him. A Brahman takes the water jar on his head, thrice pours a ladle of water from the jar on the mourner's hands who sips the water. The service ends with a blessing. The service is repeated every year instead of the usual memorial or shraddha service.

SYMBOLIC CREMATION.

Special funeral rites are sometimes performed when there is no body to be burnt. This may happen either because the deceased died in a distant land or was drowned at sea; or the burning may be symbolic, done while the person is alive, to show that he is dead to his family and caste. Sometimes when a wife has gone wrong and will not come back to her husband, he performs her funeral rites, and from that she is to him as one who is dead. Or if a Brahman gives up his father's faith and becomes a Christian or a Musalman, either at the time of his change or afterwards when his parents hear of his death, they perform his funeral rites. In these cases, the chief mourner, with the family priest and one or two near relations, go to the burning-ground and in a corner spread the skin of a black antelope. On the skin the chief mourner lays three hundred and sixty palas or Butea frondosa leaves for the head, ten for the neck, forty for each arm, ten for the ten fingers, twenty for the chest, forty for the stomach, sixty-five for each leg, and ten for the ten toes. He ties the leaves by their stems into separate bunches with sacred grass, and laying them in their former places, spreads grass on the leaves, and rolls the whole into a bundle. He holds the bundle in front of him, mixes about a pound of wheat flour, honey, and butter, and rubbing the mixture on the bundle, fastens a piece of white cloth over it. At its top, for the head he places a cocoanut, for the brow a plantain leaf, for the teeth thirty-two pomegranate or dalimb seeds, for the ears two pieces of shell-fish, for the eyes two kavdi shells their corners marked with redlead, for the nose sesame flower or seeds, for the navel a lotus flower, for the arm

bones two carrots, and for the thigh bones two brinjals, for the breasts lemons and black and red *gunja* berries Abrus pre-catorius, and sea shells or a carrot for the other parts. For the breath he puts arsenic, for the bile yellow pigment, for the phleam sea foam, for the blood honey, for the urine and excrement cow's urine and dung, for the seminal fluids quicksilver, for the hair of the head the hair of a wild hog, for the hair of the body wool, and for the flesh he sprinkles the figure with wet barley-flour, honey, and butter. He sprinkles milk, curds, honey, butter, sugar, and water on the figure, covers the lower part with a woollen cloth, fastens round its chest a sacred thread and round its neck a garland of flowers, touches the brow with sandalpaste, and sets a lighted flour-lamp on its stomach. This figure, with its cocoanut head to the south, is sprinkled with rice and the life of the dead is brought into it. When the lamp burns low and flickers the mourner offers gifts and performs the dying ceremonies. When the lamp goes out he raises a pile of wood and burns the figure with the usual rites. He mourns ten days and performs the usual memorial or shraddha rites. [Compare, The Mexicans after a battle made figures of the missing dead, burnt them and buried the ashes. Spencer's Principles of Sociology, I. 328.]

POONA 2

PREFACE

I am happy to bring out this Facsimile Reproduction of Poona District Gazetteer (Second Volume), which was first published in 1885 by the British Government in the series of Gazetteers of the Bombay Presidency. This Volume was edited by Mr. James M. Campbell, I. C. S. This encyclopaedic volume compiled 106 years ago has now become scarce and has gone out of print. The second revised edition of the Poona District Gazetteer was published in a single volume by this department in 1954. However, the utility of the Gazetteers in the Old Series is still undiminished because they contain authentic and very useful information on several aspects of life, and have the impress of profound scholarship and learning. They have not lost their utility due to the mere passage of lime. It was, therefore, felt necessary to preserve this treasure of knowledge for posterity. There is also a good demand from scholars that all the Old Gazetteers should be reprinted, even though a revised edition is available. With these considerations in view, it was thought that the Gazetteer Volumes in Old Series should be reprinted. I am sure, scholars and studious persons will find them very useful.

It may be pertinent to state that a totally rewritten Marathi edition of the Pune District Gazetteer is being brought out by us.

I am thankful to the Director, Government Printing and Stationery, Shri P. S. More and the Manager, Government Photozinco Press, Pune, Shri A C. Sayyed and other Staff in the Press for expeditiously completing the work of reprinting.

Bombay,

DR. K. K. CHAUDHARI

15 June 1991. Executive Editor and Secretary

AGRICULTURE.

[Details about Field-tools, Agricultural Processes, and Crops are chiefly taken from Mr. W. Fletcher's Deccan Agriculture.].

HUSBANDMEN.

ACCORDING to the 1881 census, agriculture supports about 500,000 people or 5C per cent of the population. The details are:

POONA AGRICULTURAL POPULATION, 1881.

| AGE. | Males. | Females. | Total. |
|---------------|---------|----------|---------|
| Under Fifteen | 103,288 | 97,174 | 200,462 |
| Over Fifteen | 155.407 | 156,074 | 311,481 |
| Total | 258,695 | 253,'248 | 511,943 |

[From materials supplied by Messrs. J. G. Moore, C. S. and A. Keyser, C. S.] Kunbis and Mali's, though the chief, are by no means the only husbandmen. Men of all classes, Brahmans, Gujar Marwar and Lingayat Vanis, Dhangars, Nhavis, Kolis, Ramoshis, Mhars, Chambhars, and Musalmans own land. About four-fifths of the landholders till with their own hands. The rest rent the land to tenants and add to their rents by the practice of some craft or calling. Kunbis depend almost entirely on the produce of their fields. They work more steadily, and have greater bodily strength than other husbandmen, and they show high skill both in dry-crop tillage and in cultivating the watered lands in which cereals are grown. At the same time, especially at a distance from trade centres, they are slow to adopt improvements, and, especially in the east, are not careful to keep their fields clear of weeds. Malis or gardeners cultivate a large area of garden and watered land. Some of them depend entirely on the produce of their fields, and manage their garden lands with great care and skill. Though, like Kunbis, Malis are slow to change their modes of tillage, they are ready to grow any new crop that seems likely to pay. They are most skilful in mixing and varying crops, and are the most regular and thorough ploughers and the cleanest weeders in the district. Where there is a constant drain on the land they are careful to use every available particle of manure and in the neighbourhood of

Poona have completely overcome their dislike to the use of poudrette. Malis are of four kinds, Phul or flower Malis, Haldya or turmeric Malis, Lingayat or *ling*-wearing Malis generally of southern or Karnatak origin, and Jire or cumin-seed Malis. Brahmans generally have their lands tilled by hired labour, themselves superintending and directing the workmen, but, in parts of Khed, and occasionally elsewhere in the west, Brahmans have for generations worked their fields without the help of hired labour. Vanis are perhaps the only class who never till with their own hands. They let their lands to tenants who pay them either in money or in kind. A large section of the landholders are Dhangars or shepherds by caste. Most Dhangars, besides tilling their lands, rear sheep and weave blankets, but some have given up rearing sheep and live entirely on the produce of their lands. Except the Haldya or turmeric Malis, no husbandmen grow only one crop.

The uncertain rainfall over a great part of the district, the poverty of much of the soil, the want of variety in the crops grown, and a carelessness in their dealings with moneylenders, have, since the beginning of British rule, combined to keep the bulk of the Poona landholders poor and in debt. Between 1863 and 1868 they suffered from the introduction of revised rates of assessment based oh very high produce prices which were wrongly believed to have risen to a permanent level. To their loss from the fall in produce prices was added the suffering and ruin of the 1870-77 famine. In spite of these recent causes of depression, the records of former years seem to show that except during the ten years of unusual prosperity ending about 1870, when great public works and the very high price of cotton and other field produce threw much wealth into the district, the mass of the laud holding classes, though poor and largely in debt, are probably at present less harassed, and better fed, better clothed, and better housed than they have been at any time since the beginning of the present century. In the west, where famines are unknown and scarcity is unusual, the husbandmen are fairly off. But in Indapur and Bhimthadi and in parts of Sirur and Purandhar they have not recovered the distress and indebtedness caused by the 1876-77 famine. In 1876-77, a large area of land was thrown out of tillage and the low price of grain during the two years ending 1882-83 has made it difficult for the landholders to recover what they lost in the year of distress. [In Indapur *jvari*, sold at seventy-six pounds in 1881-82 and at sixty-two pounds in 1882-83. The corresponding average price during the twenty years before 1881-82 was thirty -seven pounds.] At the same time the Mutha canals and other water-works, by introducing a variety of crop's and fostering more careful the tillage, have done much to enrich the landholders. As a class the landholders are hardworking,

frugal, and orderly. But, except near Poona, whose market quickens their energies, they are slower and less intelligent than the landholders of most other parts of the Presidency. Their tillage is careless, at times even slovenly, and they fail to strengthen the land by deep ploughing, by change of crops, or by the sufficient use of manure. This is due to poverty forcing them to take all they can from the land, rather than to laziness or to ignorance of the value of suitable ploughing, of plentiful manure, of clean weeding, of fallows, and of changes of crops. Their greatest want, and this with the spread of irrigation is more and more felt, is manure. As there are almost no leaf-yielding forests, as grass is scarce, and as most of the straw-giving crops are millets whose stalks are valuable fodder, there is a great scarcity of stable-litter, and from the want of other fuel most at the cowdung is lost to the land. In 1837 Colonel Sykes thought the mixing of several grains and pulses in one field was one of the chief blemishes in the Poona tillage. [Report British Association (1837), 324. More recent writers, including among them the revenue and survey officers of the district, do not share Colonel Sykes' opinion. Over most of the district the chief danger against which the husbandman has to guard is a failure of rain. Millet may perish in a year in which the hardier and less thirsty pulse will thrive or at worst will yield a fair crop. If the millet succeeds it smothers the pulse and takes no harm. The mixing of crops has also the advantage of lessening the drain on the land by taking different elements out of it.

SEASONS.

In Poona ail arable land comes under one or other of three great heads, *jirayat* or dry-crop land, *bagayat* or watered land, and *dean* or rice land. Dry-crop lands are divided into *kharif* or early and *rabi* or late. The early crops are brought to maturity by the rains of the southwest monsoon; the late crops depend on dews, on watering, and on the partial fair-weather showers which occasionally fall between November and March. Early or *kharif* crops are sown in June and July and are reaped in September and October or November. In the Maval or wet and hilly west, whose staple is rice and whose other crops are the coarse or *varkas* grains *vari*, *sava*, *nachni*, and *khurasm* the chief harvest is the early harvest. The exposure to the cold damp of the south-west rains severely tries the husbandmen of the west. But they are a hardy cheerful race and their labour is seldom made useless by a failure of crops or unprofitable from the want of a market.

In the Desh or eastern plain, where the south-west rain is light and uncertain, the early or *kharif* harvest is less important than in the

west. The chief early crops are spiked millet or *bajri* mixed with the hardy *tur* and early Indian millet or *jeari*. These are sown in late May or in June on the first sufficient rainfall. In good years they ripen in late September and October; in bad years not till November. When the early crops are reaped in September and where the land permits, a second or *dnsota* crop is raised. As, after October, rain rarely falls in the hilly west, except a little wheat grown on the eastern fringe, the late or *rabi* dry-crop harvest is of comparatively little importance. In the east of the district which is within the range of the north-east rains, the late or *rabi* harvest is more important than the early harvest. There the late crops are sown in October and November and ripen in February and March. They are chiefly *shalu* and other coldweather Indian millets and gram, lentils, and other pulses.

SOILS.

[Mr. A. Keyser, C. S., and Captain H. Robertson (1821) in East India Papers, V. 565, 566. The soil of the district is lighter in the west than in the cast. It belongs to three classes, black or kali, red or tambdi, and coarse gray or barad. In some places each class of soil blends with the other in varying proportions and in turn is modified by sand, gravel, lime-salts, and other ingredients. The *kali* soil is generally black or nearly black, and has sometimes a gray or a bluish tinge. It is commonly found in layers several feet deep. It belongs to the plain east rather than to the hilly west, and covers wide areas near rivers and large streams. In such places it is of great and uniform depth. It is sometimes injured by being mixed with lime nodules; and, occasionally, from the action of water or the presence of mineral salts, it becomes stiff and clayey, which, except in years of heavy rainfall, much lessens its richness. Excellent black soil of small and varying depth, with its surface covered with black basalt stones, is found on tablelands. Black soils are richer than either red or coarse gray soils. The sun does not harden their surface but cracks and crumbles it, and as they keep their moisture longer than other soils they are the favourite land for late or rabi crops. They yield all the produce of the Deccan in abundance and are specially suited for the growth of wheat, gram, and sugarcane. Towards the west as the level rises the black soil shallows till in the waving slopes that skirt the hills it changes to red or gray. The black soil is of two kinds, the gaping black soil known as dombi and kevaldhas and the stony black called khadkal or dhondal. Though better than the stony black the gaping black soil is very thirsty and requires plentiful and constant watering to bring cut its powers and keep them in action. If it is not continually drenched while the crop is growing the people say that the crops pine and wither. The

stones in the stony black are said to make it firmer and better able to hold water. This is the most valued land for the ordinary dry-crops whose supply of water depends on the local rainfall. This stony black is not so strong and as a rule is shal-lower than the gaping black. Being lighter the gaping black is more easily worked, but has to be ploughed oftener than the stony black and wants more manure. The best black soil yields year after year apparently without suffering though its powers might have become exhausted if it were not for the relief given by sowing a mixed crop. Other and poorer black soils occur mixed with sand and clay. The reddish or copper-coloured soils called tambat or tambdi are always shallower and coarser than the black. They are probably the ruins of the iron-bearing rocks without the decayed vegetable element which deepens the colour of the black soils. They are often injured by a mixture of gravel, but when watered by frequent showers are generally well suited for the *kharif or* early crops. The red soil is commoner and richer in the west than in the east. It has many varieties, for it includes lands on the skirts of bills and other most barren soils. Red soil is generally rough and stiff and requires deep ploughing. The best red soils are found near Pabal, midway between Khed and Sirur, where also the plougning is very deep. The red soil of Pabal itself is very powerful, but, requires great labour. It is a mixture of sand with a smallor quantity of clay. There are three varieties of red soil, pure red or nirmal tambdi, upland or mal jamin, and sandy or valsari jamin. The pure red or nirmal tambdi is lighter and richer than the others and has perhaps a larger proportion of sand. The upland or mal jamin is a reddish soil think-spread over rock. According to its depth and the quantity of Band and friable stones it is of two varieties mal murud that is plain red land and tambdi malsi that is hill red land. Sandy or *valsari jamin* when deep enough yields fair crops. Higher up the slopes or covering the tops of the lower uplands of the eastern plain is the coarse gray or barad. It varies in colour from a light reddish brown to gray, is of a coarse gravelly or loose friable texture, and is greatly wanting in cohesion. It is decomposed basalt with a mixture of iron ore. It does not yield wheat, peas, or any late or coldweather crops; but in seasons of heavy rainfall spiked millet and the early pulses give a good return. When waste it bears nothing but scanty spear-grass. It does not occur in the hilly west. Gavkhar pandhari or white village soil is much like the coarse gray in colour, but is finer and is often of great depth. It is only found close to villages or on deserted village sites. Its special appearance is probably due to the manure which gathers on village sites and gives the soil a chalky character. It is a clean light soil and on a basis of black mould yields excellent crops, especially of tobacco. There are also patches of stiff clayey soil called *shedvat* that is white clayey or *chopan* that is clayey

or loamy and of *chikni* or pure clay in which nothing grows. Clayey patches, black brown or white in colour, are generally found on the banks of rivers. A rare swampy or undrained soil of a clayey texture is termed shembat that is stony and upal that is sodden. A rich alluvial soil called *dheli* or *keytal* that is soil left by the overflowing of rivers. ranges in colour from pale yellow to dark brown. It covers a limited area, but, partly from the vegetable matter it holds and partly because it is regularly strengthened by fresh deposits, it is the richest soil in the district. Near some of the larger rivers within flood limits is a narrow belt of land of no great value known as malai or vegetable land. In the hilly west is a barren blackish soil called murmad that is crumbly rock. It is very stiff and hard and is found mostly at the foots of hills wherever water lodges. Here and there in black and other rich soils spots yield wretched crops compared with the surrounding fields. These spots are called chunkhadi or lime-laden because limestone is always found near the surface.

ARABLE LAND.

Of an area of 5347 square miles 5198 square miles or 3,327,283 acres or 97.21 per cent have been surveyed in detail. Of these 467,884 acres or 14.06 per cent are the lands of alienated villages. The rest contains, according to the revenue survey, 2,113,221 acres or 63.51 per cent of arable land; 272,271 acres or 8.18 per cent of unarable; 21,107 acres or 0.63 per cent of grass or *kuran*; 263.797 acres or 7.92 per cent of forest; and 189,003 acres or 5.68 per cent of village sites, roads, and river beds. [The forest area has lately been increased to 422,400 acres or 661 square miles.] In 1881-82 of the 2,113,221 acres of arable land in Government villages, of which 193,224 or 9.14 per cent are alienated, 1,786,065 acres or 84.51 per cent were held for tillage. Of this 44,503 or 2.50 per cent were garden land, 27,674 acres or 1.54 per cent were rice land, and 1,713,888 acres or 95.96 per cent were dry-crop land.

HOLDINGS.

Though large holdings are found in many villages the holdings as a rule are small. They are also so divided among members of different families that the entries in the Government books are not a complete guide to the average size of a holding. In the hilly west, where the chief grains are rice, *nagli*, and other coarse grains, which require great attention and labour, the holdings are generally smaller than in the east. In 1882-83, including alienated lands, the total number of holdings was 227,871 with an average area of about nine acres. Of the

whole number, 86,193 were holdings of not more than five acres; 43,898 were of six to ten acres; 45,359 of eleven to twenty acres; 30,677 of twenty-one to fifty acres; 11,340 of thirty-one to forty acres; 7575 of forty-one to fifty acres; 2739 of fifty-one to one hundred acres; seventy-six of 101 to 200 acres; thirteen of 201 to 300 acres; and one above 300 acres. More than 100 acres of dry-crop land is considered a largo holding, fifty to 100 acres is considered a middle-sized holding, and less than twenty-five acres is considered a small holding:

POONA HOLDINGS, 1882-83.

| SUB- | 1-5 | 6-10 | 11-20 | 21-30 | 31- 40 | 4-50 |
|-----------|--------|--------|--------|--------|--------|--------|
| DIVISION | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Junnar | 21,048 | 5004 | 4152 | 1594 | 453 | 191 |
| Khed | 27,524 | 8315 | 6829 | 2052 | 544 | 139 |
| Maval | 8373 | 6917 | 4929 | 4127 | 3414 | 5151 |
| Haveli | 14,435 | 13,925 | 11,829 | 9916 | 1125 | 105 |
| Sirur | 6022 | 3726 | 4832 | 2150 | 783 | 119 |
| Purandhar | 3458 | 2695 | 3S48 | 2428 | 621 | 206 |
| Bhimthadi | 3943 | 2645 | 7489 | 6443 | 2524 | 760 |
| Indapur | 1390 | 671 | 1451 | 1967 | 1670 | 901 |
| Total | 80,193 | 43,898 | 45,359 | 30,677 | 11,340 | 7575 |

| SUB- DIVISION | 51-100 Acres. | 101- 200 Acres. | 201- 300 Acres. | Over 300 Acres. | Total. | Land Revenue | Total Area. |
|------------------|------------------|-----------------------|-----------------------|-----------------------|--------|-----------------|-------------------|
| Junnar | 180 | 20 | 2 | 1 | 32,844 | £ 14,747 | Acres. 221,761 |
| Khed | 64 | 6 | 1 | 1 | 45,474 | 15,981 | 283,824 |
| Maval | 1092 | 2 | 2 | | 34,010 | 7631 | 126,037 |
| Haveli | 95 | | | | 61,460 | 18,822 | 261,285 |

| Sirur | 77 | 6 | 4 | | 17,719 | 13,824 | 236,212 |
|-----------|------|----|----|---|---------|---------|-----------|
| Purandhar | 119 | 21 | 3 | | 13,399 | 9798 | 166,216 |
| Bhimthadi | 378 | 21 | 1 | 1 | 14,205 | 23,454 | 451,197 |
| Indapur | 734 | | | | 8790 | 10,645 | 220,746 |
| Total | 2739 | 76 | 13 | 1 | 227,871 | 114,902 | 1,967,278 |

STOCK.

As in other famine districts farm stock considerably decreased in 1876-77, and has not yet reached its former level. In 1875-76, the year before the famine, the stock included 21,857 carts, 63,629 ploughs, 233,759 bullocks, 160,097 cows, 12,107 he-buffaloes, 45,765 she-buffaloes, 12,790 horses including mares and foals, 4932 asses, and 342,081 sheep and goats. [Horses and asses, though almost never used for field purposes, are usually classed with agricultural stock.]. According to the 1882-83 returns the farm stock included 21,044 carts, 52,630 ploughs, 227,619 bullocks, 144,949 cows, 12,084 he-buffaloes, 40,646 she-buffaloes, 11,163 horses including mares and foals, 6745 asses, and 289,688 sheep and gouts. The details are:

POONA AGRICULTURAL STOCK, 1882-83.

| | CARTS. | | PLOUGHS. | | | | BUFFALOES. | | | | |
|------------------------|---------|----------|------------------------------|--------------------------------|---------------|--------|------------|--------------|------------------------------------|------------------------|-------------|
| SUB- DIVI- SION. | Riding. | Draught. | With two Bull- ocks | With four Bull- ocks. | BULL OCKS. | COWS. | Males | Femal- es | HORSES, MARES, AND FOALS. | SHEEP AND GOATS. | ASS- ES. |
| Junnar | 543 | 1529 | 4288 | 3948 | 27,481 | 16,944 | 2731 | 6320 | 906 | 40,870 | 856 |
| Khed | 383 | 3224 | 7436 | 4849 | 44,176 | 31,664 | 1946 | 10,858 | 1252 | 19,409 | 783 |
| Maval | 22 | 2005 | 6213 | 813 | 16,523 | 12,370 | 2810 | 4175 | 293 | 1927 | 64 |
| Haveli | 962 | 5110 | 4508 | 4359 | 34,046 | 25,229 | 1556 | 8763 | 2176 | 21,169 | 2140 |
| Sirur | 472 | 1512 | 1432 | 4080 | 27,296 | 18.255 | 517 | 2183 | 1484 | 38,107 | 736 |
| Purandhar | 257 | 1093 | 1540 | 3017 | 23,987 | 13,883 | 597 | 3540 | 1252 | 31,267 | 589 |
| Bhimthadi | 59 | 2575 | 525 | 3434 | 36,596 | 18,518 | 866 | 2712 | 2547 | 83,786 | 1015 |

| Indapur | 25 | 1213 | 780 | 1508 | 17,514 | 8086 | 1061 | 2095 | 1253 | 53,153 | 562 |
|---------|------|--------|--------|--------|---------|---------|--------|--------|--------|---------|------|
| | 2723 | 18,321 | 26,722 | 25,908 | 227,619 | 144,949 | 12,084 | 40,646 | 11,163 | 289,688 | 6745 |

PLOUGH OF LAND.

With four oxen a Kunbi will till some sixty acres of light soil. Sixty acres of shallowish black soil require six or eight oxen. Eight oxen can till some fifty acres of deep black soil, provided that in occasional years when ploughing is necessary the landholder is able to hire two more pairs of bullocks. With eight pairs of oxen, and the power where necessary of making use of two pairs more, an acre or two of the sixty might be kept under the lighter garden crops, Many husbandmen have much less than the proper number of cattle, and have to join with their neighbours before their fields can be ploughed.

CROPS.

In 1881-82, of 1,786,065 acres, the whole area held for tillage, 209,447 acres or 11.72 per cent were fallow or under grass. Of the remaining 1,576,618 acres, 18,740 were twice cropped. Of the 1,595,358 acres under tillage, grain crops occupied 1,374,702 acres or 86.16 per cent, of which 588,502 were under Indian millet, jvari, Sorghum vulgare; 557,807 under spiked millet, bajri, Penicillaria spicata; 60,524 under wheat, gahu, Triticum aestivum; 52,365 under ragi or nachni, Eleusine corocana; 47,885 under rice, bhat, Oryza saliva; 32,342 under sava and vari, Panicum miliaceum and miliare; 3844 under maize, makka, Zea mays; 1084 under rala or kang, Panicum italicum; 397 under kodra or harik, Paspalum frumentaceum; 141 under barley, jav, Hordeum hexastichon; and 29,811 under other grains of which details are not given. Pulses occupied 85,919 acres or 5.38 per cent, of which 28,879 were under gram, harbhara, Cicer arietiuum; 13,065 under kulith or kulthi, Dolichos binorus; 12,851 under tur, Cajanus indicus; 3900 under mug, Phaseolus mungo; 1519 under udid, Phaseolus radiatus; 836 under peas, vatana, Pisum sativum; 836 under masur, Ervum lens; and 24,033 under other pulses. Oilseeds occupied 102,786 acres or 6.44 per cent, of which 29,449 were under gingelly seed, til, Sesamum indicum; 159 under linseed, alshi, Linum usitatissimum and 73,178 under other oilseeds. Fibres occupied 8382 acres or 0.52 per cent, of which 4565 were under cotton, kap, Gossypium herbaceum 1375 under Bombay hemp, san or tag, Crotalaria juncea; 18 under brown hemp, ambadi, Hibiscus cannabinus; and 2424 under other fibres. Miscellaneous crops occupied 23,569 acres or 147 per cent of which 8089 were under

chillies, *mirchi*, Capsicum frutescens; 5502 under sugarcane, *us*, Saccharum officinarum; 817under tobacco, *tambakhu*, Nicotiana tabacum; and the remaining 9161 under various vegetables and fruits.

FIELD TOOLS.

The field tools are, the plough, *nangar*; the seed-drills, *pabhar* and *moghad*; the hoes, *kulav*, *kulpe* or *joli*, and *pharat*; the beam-harrow, *maind*; the dredge or scoop, *petari*; and the cart, *gada*.

Plough.

The plough, nangar or when small nangri, is usually of babhul Acacia arabica wood. It contains live distinct meces, the pole halas, the share or coulter nangar, the yoke ju or shilvat, the tail rumane, and the handle muthya. These five parts are kept together by a leather rope, vethan, which passes back from the yoke behind the plough tail, and forward again to the voke. To the share a moveable iron shoe or phal is fixed by a ring called *vasu*. A large plough for stiff soil which works nine inches deep requires seven to ten yoke of oxen. In the light eastern Desh soils the plough requires only two voke. In the west, where it is fit only for stirring flooded rice land and for breaking the surface after it has been softened by rain, the plough is light enough to be carried on a man's shoulder and one voke of oxen are enough to draw it. The large plough is an efficient implement passing under the hard crust, turning the soil in great lamps, and exposing a large surface to the weather. It can be made to cut a deep or a shallow furrow by changing the angle of the share or coulter. The Kunbis manage the plough with considerable skill. One man can work a plough with two yoke of oxen turning them at the end of the furrow by voice alone. With a team of six or seven pair a boy is usually seated on the yoke of the third pair and hustles them along with whip and voice. Each ox knows his name and obeys the boy's voice. The furrows are never straight and the field is usually ploughed crosswise as well as lengthwise. In the plain east, the plough is often left in the field when not in use, the iron shoe the ropes and the yokes being taken home. In the east, a plough with four separate yokes varies in value from 16s. to £1 (Rs. 8-10). With yearly repairs costing about 3s. (Rs. 1 ½), a plough lasts for five years. In the west a complete plough costs 4s. to 5s. (Rs. 2-2½). [Mr. Shearer, the agricultural instructor in the Poona College of Science, has found that, by using an iron share instead of the heavy wood block, the nativa plough becomes an excellent subsoiler, passing through the most caked and hardened surface, and cutting the roots of bushes which had formerly to be dug

out by the hatchet. These adapted ploughs have been made at the workshops of the College of Science at a cost of £1 5s. (Rs. 12 $\frac{1}{2}$). They have also been successfully copied by village blacksmiths. Mr. Shearer to Collector of Poona, 105, 14th July 1882.]

Seed-Drill.

The seed-drill, pabhar, is a model of simplicity and ingenuity and is cheap and effective. It consists of two to four wooden iron-shod shares or coulters called phans, fed with seed through bamboo tubes from a wooden bowl or chade into which the seed is dropped by hand. The whole is held together by ropes strained in different directions. It is drawn by two oxen. Gram and wheat are sown by a larger drill called moghad drawn by four oxen. Its tubes are larger and the shares or coulters stronger so as to pass deeper into the soil. It sows four to six inches deep to suit some of the cold-weather crops. Both the small and the large seed-drill are often used as harrows by removing the middle shares, the bamboo tubes, and the bowl. A drill costs about 5s. (Rs. 2 ½) and with care lasts four or five years.

Hoe.

The hoe, kulay, is used for breaking the clods thrown up by the plough, for loosening the surface when the plough is not used, for removing weeds, for filling cracks or fissures, and for covering the seed. The hoe is two shares or coulters joined by a level cross iron blade or phas set obliquely in a wooden beam. A pole unites it to the yoke and it is guided by an upright handle. When he wishes to work the hoe deep the driver stands on the wooden beam or lays heavy stones upon it. It requires only one yoke of oxen, costs about 7s. (Rs. 3½), and lasts four or five years. The *kulpe* also called the *join*, is a weeding hoe. It is two iron blades or golis like a mason's square with their inward ends six inches apart set in a piece of wood to which the yoke is joined by a pole and ropes. It has two handles the rumane and the *veski*, the *veski* being a loose forked stick which is held on the top. It is drawn by two oxen and is driven so that the row of young plants passes through the space between the blades. The kulpe is often worked double, that is two kulpes are drawn by one pair of oxen. It requires much care in working, costs about $4\frac{1}{2}s$. (Rs. 9), and lasts five years. The pharat is like the kulav, only its blade is longer, three feet six inches in length, and its woodwork is lighter. It is used to follow the seed-drill and cover the seed and is drawn by two oxen. It costs about 4s. (Rs. 2).

Beam-Harrow.

The beam-harrow, *maind* or *phala*, is a large beam of wood fitted with a yoke and upright handle. It requires four oxen and two men to work it. It is used chiefly in high tillage to break clods and level the surface. It is also used after the wheat and gram are in the ground to press the soil, as pressed soil keeps its moisture longer than loose soil. It costs about 8s. (Rs. 4) and lasts many years.

Scoop.

The scoop or dredge, *petari*, is used only in rice lands. The bottom lip is formed by a plank three feet long to which the oxen are harnessed. A stout handle fixed into the middle of the plank sloping back forms a support to a series of bamboo slips laced together with string which rise one above the other about two feet six inches, presenting a curved sloping surface against which as the scoop passes through the ground the loose earth gathers. It is drawn by two oxen and costs about 3s. (Rs. 1 ½).

Cart.

Up till 1836 the carts or *gadas*, of which there were very few, were cumbrous vehicles consisting of a large strong frame of wood supported on two solid wooden wheels over which the sides projected on props that rested on the axle outside of the wheels. The naves of the wheels were fitted inside with iron tubes in which the axles worked. These and the wheel tires were the only iron-work as the whole construction was held together by tightly strained ropes. The cart was used to carry crops, and with the addition of a large shallow basket to carry manure. It cost about £10 (Rs. 100) and was usually the joint property of three or four landholders. The axles being wooden often broke and new wheels and tires were needed at long intervals. With these repairs the cart lasted from generation to generation. Colonel Sykes mentions a cart called *jang* or *jungia* used for carrying manure. It was a common cart with a basket of *nirqundi*, Vitex trifolia, and tur, Cajanus indicus, stems tied to the top of it. In 1836 Lieutenant Gaisford, of the Revenue Survey, planned a new cart with high light wheels and a light body. The new carts were first made at Tembhuni in Sholapur and the craftsmen of the villages round were trained to repair them. At first very few landholders would buy the new carts. Afterwards the opening of roads which did away with the necessity of very heavy and massive carts, and the abolition of transit duties which made it possible to carry local produce to distant

markets, increased the number of carts in Indapur from 291 in 1835-36 to 1165 or 300 per cent in 1865-66, in Bhimthadi from 273 in 1840-41 to 1011 or 270 per cent in 1870-71, in Pabal from 754 in 1840-41 to 1304 or 78 per cent in 1870-71, in Haveli from 1146 in 1840-41 to 2284 or 99.30 per cent in 1871-72, and in Purandhar from 191 in 1843 to 578 or 202 per cent in 1873. In spite of the opening of the railway, which greatly reduced the number of carts employed in long journeys, the latest returns show a total of 18,321 carts throughout the district. The present carts cost £6 to £8 (Rs, 60-80) and hold ten to twenty hundredweights (16-30 mans). They are drawn by one pair of bullocks, and are chiefly made of babhul and teak wood by local carpenters.

HAND TOOLS.

Besides the tools worked with the help of bullocks there are five hand tools: the pick, *kudal*, costing 1s. (8 as.); the hoe, *khore*, costing 1s. to $1\frac{1}{2}$ s. (8-12 s.); the sickle, khurpe, used for weeding and grasscutting, costing 3d. to 6d. (2-4 as.); the billhook, koyata, used only in the west and carried behind the back in a wooden socket, costing 1s. to 2s. (Re. ½-1); and the rake, dantale, made of wood with four or five broad teeth, used to gather chaff in the thrashing floor and in the west to gather grass and tree loppings to burn on the rice fields. These tools can all be easily bought in any village, and every Kunbi owns a fairly complete set worth about £2 (Rs. 20). A yearly charge of 6s. to 8s. (Rs. 3-4) keeps them in good order. If fresh tools are wanted the Kunbi, if necessary, buys a tree, fells it, strips it, and hales it to the village. The carpenter fashions the tools, and the iron-work is bought from wandering blacksmiths. The ropes are made either by the Kunbi himself or by the village Mang from fibre grown in the Kunbi's field. [Bombay Government Selections.. C L I, 33 -34.]

PLOUGHING.

A field is not ploughed every year. In dry-crop lands thorough ploughing is rare. The usual practice both in the west and in the east is to plough the shallower black and light soils every other year, on the alternate years going over the land only with the hoe or *kulav*. Many deep heavy soils are ploughed not of teuer than once in four or five years. In the in terval the he or perhaps the harrow is used. Early or *kharif* land is ploughed in December, January, and February, and the hoe is used to break the surface immediately before sowing. As the soil is lighter, the heavy eastern plough with six or eight pairs of bullocks is not required in the west. A lighter plough with one or two

pairs of bullocks is enough in the western plains, and on the steep hillsides where a plough cannot work the shallow soil is loosened by the hand with a bent piece of wood tipped with iron.

SOWING.

The Kunbi is very careful in his choice of seed.. If his own crop is good he picks the largest and best-filled heads and keeps their grains separate as seed for the next year. The produce of special heads is often sold as seed and fetches half as much again as ordinary grain of the same kind. Vanis also keep good seed grain in stock which they advance to Kunbis, exacting fifty or a hundred per cent more in kind at harvest time. The sowing of the early or *kharif* crops begins in May or in June after the soil is well moistened by rain. In the plain country the seed is sown by the drill and covered by the long-bladed hoe or *pharat* which follows close behind the drill. When a mixed crop is to be sown one of the drill tubes is stopped and a man follows the drill, holding a horn-tipped tube fastened by a rope from which he sows seed in the furrow left by the stopped tube. This process is called *moghane*. In the west for the early or *kharif* crops a small plot is chosen, and, in March or April is covered a foot or so deep with cowdung, grass, leaves, and branches, which are burnt. In this plot, after a good fall of rain in May or June, the surface is loosened by an iron-tipped wooden hoe and the seed is sown broadcast and thick. In the course of a month when the thick-sown seedlings are about a foot high they are planted in irregular rows in patches of prepared land.

MANURE.

The people understand the value of manure, but litter and cowdung are scarce and mineral and other rich manures are too dear to be used in the growth of the ordinary crops. In the plain part of the district east of Pabal, where the rainfall is scanty or uncertain, dry-crop land is seldom manured. This is partly because manure is scarce and partly it is said because if the rainfall is scanty, manure does more harm than good to the crop. In the hilly west and in the western fringe of plain land where the rain is regular and plentiful, manure is carefully hoarded and used whenever possible. The quantity used seems to be regulated entirely by the supply. Even here manure is scarce and weak, merely wood-ashes and sweepings. In the case of watered crops, hemp or *tag* Crotalaria juncea, *methi* Trigonella foenumgraecum, or *khurasni* Verbesina sativa are sown and when about five inches high are ploughed and the land is flooded and left for twenty days. Malis or gardeners and all others who raise crops all the year

round are very careful to save every available particle of manure. In the land about Poona, which is watered all the year round, poudrette, the dung of cattle sheep and goats, stable litter, and refuse are used. The use of poudrette as a rule is restricted to a range of ten miles to the east of Poona along the line of the Mutha canals. Formerly there was a strong feeling against the import into a village of outside manure. This feeling has passed away, and manure is eagerly sought and frequently brought from long distances. The sewage of the cantonment and city of Poona, after being buried for three or four months, is bought by the husbandmen of the surrounding villages, and it has become a recognized and allowed practice for Kunbis to cart and handle this manure, which not many years ago they held in horror. The manure is sold in the trench at about three carts or one ton for 2s. (Re. 1). In 1874-75, the year when the right bank Mutha canal was opened, the quantity of poudrette turned out by the Poona municipality was 2220 cubic yards and the value realised was £76 12s. (Rs. 766); in 1881-82 the quantity turned out was 11,760 cubic yards and its value £3077 12s. (Rs. 30,776). Cowdung is used only by those who have stall-fed cattle or who are rich enough to buy it. As cowdung cakes are the fuel of Poona most of the cowdung within twenty miles of the city is carefully stored, made into cakes, and sent in large cartloads to Poona where it is also used for burning the dead. [Not even cowdung cakes escape adulteration. There are two kinds of cowdung cakes the kanshen or pure cake and the valshen or mixed cake half earth and half cowdung, Mr. J. G. Moore, C. S.] In dry land and in watered lands in outlying towns and villages, cowdung, goat and sheep dung, stable-litter, and village refuse are the chief manures. The dung and urine of sheep are a valuable manure and owners of flocks are hired to graze their sheep in fields for two or three nights at a time. Dhangars usually wander from village to village in a regular yearly circuit, in the plains during the rains and cold weather, and in the west during the hot months. They are paid by the husbandmen to fold their sheep in their fields. In some places they get only their food, in other places where gardens abound as much as 1s. or 2s. (Re. ½-1) is paid for one night of a hundred sheep. No chemical or imported manures are used, but the district officials are making experiments with bone-dust.

IRRIGATION

Watered land is of two classes, *motasthal* or bag-watered, and *patasthal* or channel-watered. Well or bag irrigation is of great importance in Indapur and other drought-stricken parts of the east.

Motasthal.

Wells used for irrigation are circular, eight to ten feet across and twenty to fifty feet deep. They are sometimes pitched with brick or stone and mortar, more usually they are lined with dry cut-stone, and frequently they are built only on the side on which the bag is worked. An unpitched well costs £10 to £20 (Rs. 100 - 200), a well lined with dry stone £25 to £50 (Rs. 250-500), and with brick or stone and mortar £40 to £200 (Rs. 400 - 2000). The water is raised in a leatherbag or mot, one half of which is two feet broad and is stretched open at the mouth by an iron ring, the other end is much narrower and is not stretched. A thick rope is fixed to the centre of two stout bars, which, at right angles to each other, cross the broad mouth of the bucket, and is passed over a small wheel some four feet above the lip of the water-trough or *tharole* where it is supported by a rough wooden frame. A second thinner rope is fastened to the small mouth of the bucket and passed over a roller which works on the lip of the trough. Both these ropes are fastened to a yoke drawn by oxen. The length of the ropes is so adjusted that the narrow half of the bucket doubles along the broad half and in passing up or down the well the two mouths are brought on a level with each other. When the full bucket reaches the top of the well the narrow mouth follows its own rope over the roller into the trough and allows the water to escape while the broad mouth is drawn up by its rope to the wheel four feet higher. The water-bag or *mot* is of two sizes, one measuring about ten feet from mouth to mouth and worked in deep wells and by four oxen, the other five to six feet and worked in small wells and by two oxen. The bag and its appliances cost about £1 10s. (Rs. 15). [The details are: The leather part 16s. to £1 (Rs. 8 -10), the iron ring 2s. to 3s. (Rs. 1 -1 $\frac{1}{2}$), the upper or thick rope 1s. 6d. to 2s. (Re. $\frac{3}{4}$ -1), the lower rope about 6d.(4 as.), the wheel including its iron axle 1s. 6d. (12 as.), the roller from 9d. to 1s. (6-8as.), and the rough wood frame 2s. (Re. 1). The bucket lasts ten or twelve months and the wooden work and the ring four or five years. The thicker rope lasts a year and the thinner rope six months. A six feet long bag on an average raises 57 gallons and 3 guarts of water each time it is emptied. In this way a man and a pair of bullocks raise 2931 gallons of water in an hour or 20,517 gallons in a working day of seven hours. The same man with two buckets and two pairs of bullocks raises 41,034 gallons of water which at eight pounds to the gallon is equal to 328,272 pounds Troy.

In 1882-83, of 18,651 wells about 3203 were step-wells and 15,448 dip-wells. [Of these 3105 were used in 1881-82 for drinking and washing, and 15,423 for watering the land.] A well generally waters

one to thirteen acres and the depth varies from twenty feet in Haveli and Sirur to fifty feet in Junnar and Bhimthadi. The cost of building varies from £30 to £500 (Rs. 300 - 5000) in the case of a step-well, and from £10 to £200 (Rs. 100 - 2000) in the case of a dip-well. There were also 888 ponds or reservoirs:

POONA WELLS AND PONDS, 1882-83.

| | | | WE | ELLS. | | | |
|-------------------|---------|--------|-------------|---------|------------|------------|-------|
| SUB- DIVISION. | Wit | h Step | os. | Witho | out Step | os. | PONDS |
| | Number. | Depth | Cost. | Number. | Depth. | Cost. | |
| | | Feet. | £ | | Feet. | £. | |
| Junnar | 193 | 50 | 30-100 | 3853 | 50 | 20-80 | |
| Khed | 456 | 30 | 100- 500 | 2838 | 20 | 20- 200 | 433 |
| Maval | 220 | 30 | 50-90 | 275 | 40 | 30-80 | 245 |
| Haveli | 600 | 20 | 55-200 | 1329 | 25 | 10- 150 | 77 |
| Sirur | 197 | 35 | 50- 110 | 1819 | 40 | 40-90 | 26 |
| Purandhar | 368 | 31 | 50-120 | 1589 | 33 | 40- 100 | 11 |
| Bhimthadi | 855 | 40 | 70-90 | 2518 | 50 | 50-70 | 20 |
| Indapur | 311 | 30 | 40-120 | 1227 | 35 | 30- 100 | 26 |
| Total | 3203 | 20-50 | 30-500 | 15,448 | 220- 50 | 10- 200 | 888 |

A class of people called Panadis. that is water-showers who are generally Marathas, Mhars or Gosavis is by caste, are employed to point out where water will be found. They examine the soil and the adjoining wells and sometimes lie down with one of their ears to the ground to ascertain the flow of water below. The people still consult, them though they are said to be less trusted than they used to be. The

water-shower is paid a small fee in advance and a larger fee if water is found.

Patasthal.

Patasthal or channel-watering from the great saving of labour is far more profitable than well-watering. At the same time it is much less common as the number of sites with a sufficient head of water and command of land is limited. The chief channel water-works are across the Mina at Kusur, Vaduj, and Narayangaon, which water respectively twenty-five, seventy-eight, and 367 acres of garden land. The Narayangaon work is of some magnitude, the irrigating channels being two miles in length. None of these last through the year; the supply in almost all cases fails in February or March. Where sugarcane and other twelve-month crops are grown the channel supply is eked out from wells. Except the Government canals, channel water-works on a large scale are hardly known. The majority of the dams or bandharas are built of mud, and are renewed every year after the rains. A masonry dam which commands 500 to 600 acres and has cost £300 to £400 (Rs. 3000-4000) is considered a large work. The channels are not bridged, hedged, or otherwise sheltered, and the village cattle and carts cause much injury and waste. When the water in the river begins to fall below the level of the dam or channel head it is usual, if the distance is not great, to lift the water into the channel by a large wooden shovel or scoop hung by a rope at the proper level from a rough tripod of sticks. The scoop is swung to and fro by one or two men in such a way as at each swing to scoop up and throw a small quantity of water into the channel. This method does not raise water more than a foot or eighteen inches, but is useful when perhaps only one watering is required to complete the irrigation of a crop. The wells are the property of individuals, but the channel water is shared by all who originally built or who yearly rebuild the dam. The shares are portioned out in time, hours or days. This system of division by time works smoothly. The arrangement is superintended and regulated by one or more men called *patwaris* or channel-keepers who prevent disputes and keep the canals in working order. They are paid sometimes by grants of land and more often by small shares of garden produce.

GOVERNMENT WATER WORKS.

[The Poona Water Works Account owes much to corrections and additions by Mr. W. Clerke, M. Inst. C. E., Executive Engineer for Irrigation, Poona.] The chief water-works made or repaired by the

British Government are the Mutha and Nira canals, and the Kasurdi, Matoba, Shirsuphal, and Bhadalvadi reservoirs. Of these the Mutha and Nira canals draw their supply from the Mutha and Nira rivers which rise in the Sahyadris and have a never failing flow of water. The Matoba reservoir is fed from the right bank Mutha canal; the remaining reservoirs entirely depend on local rain. No landholders are forced to make use of water. Landholders who wish to have water apply to the subordinate resident on the works, and, either at the time of asking or at some later time, sign a form showing for how long and for what crop water is required. At the end of the season the areas watered are measured by the canal staff and the area and the charges sanctioned by Government are shown in a form which is sent to the Collector to recover the amount. The water rates, which are in addition to and distinct from the land rates, arc fixed under the orders of Government on a scale which varies according to the crop for which water is required.

Since the beginning of British rule the scanty and uncertain rainfall in the country to the east of Poona had caused frequent failure of crops and much loss and suffering. In 1863-64, a more than usually severe drought caused such distress that Government determined to find how far this tract could be protected from famine by water-works. The inquiry was entrusted to Captain, now Lieutenant-General, Fife, R. E., who, as small reservoirs were then in favour, spent the season of 1863-64 in surveying the district to find sites for storage lakes. In a report dated the 25th of February 1864, Colonel Fife submitted the result of his investigation. This comprised detailed plans and estimates for six small reservoirs at Kasurdi where there was an old work, at Matoba, Khateka Durva, Khambgaon, Bhadgaon, and Chutorlkur, all in Bhimthadi. Many other sites were examined and found unfavourable. His experience in this part of Poona satisfied Colonel Fife that small reservoirs were enormously costly and were open to the fatal objection that in any season of severe drought they would be useless as the streams that feed them entirely fail. He recommended that water should be led from the Mutha river by a high level canal starting from above Poona and extending to near Indapur, a distance of about a hundred miles. The Bombay Government agreed with Colonel Fife that small lakes were useless and that the only certain means of protection from famine was the water of rivers whose source is in the Sahyadris. The Mutha canal works were sanctioned, and the experience since gained, which embraces both river and lake works, leaves no question that Colonel Fife was right in holding that small storage lakes would fail to guard east Poona from famine. [Colonel, now Major-General, Strachey, then Inspector-General of Irrigation, expressed similar

opinions with regard to Gujarat, Khandesh, and the Deccan. Mutha Canals Report, 14th-February 1879.]

Mutha Canals.

Of the water-works which have been made since 1864 the chief are Lake Fife and the Mutha Canals. The final plans and estimates for the Mutha Canals scheme were submitted in 1868 and the work was begun in December of that year. The scheme included a large storage reservoir or lake at Khadakvasla on the Mutha river ten miles west of Poona, which has since been named Lake Fife. By placing the headworks on the Mutha river an unfailing supply of water was secured as the source of the Mutha is among the Sahyadri hills where there is a certain rainfall of about 200 inches. The suggestion to use the Mutha river Water for irrigation was recorded by the Honourable My. Reeves in 1855. Mutha Canals Report, 14th February 1879. From Lake Fife two canals start, one on each bank of the river. The right bank canal was designed to be 99½ miles long, but the actual completed length is 69½ miles ending in the village of Patas. The discharge at the head is 412 cubic feet a second and this can be increased to 535 cubic feet. The canal passes through the station of Poona. It was designed to command 230 square miles or 147,200 acres of land. As the complete design has not been carried out the actual area under command is 147 square miles or 94,080 acres, the whole of which suffers from scanty and uncertain rainfall. [The details of the rainfall at six places on the canal during the three years ending 1881 are:

Mutha Canals Rainfall, 1879-1881.

| | HEAD-WOI | | _AKE | | NA, 1 MILE. | | URULI, 35th Mile. | | |
|----------|------------------|------|------|-------|----------------|-------|-------------------|-------|-------|
| | 1879. 1880.1881. | | | 1879. | 1880. | 1881. | 1879. | 1880. | 1881. |
| | In. | In. | In. | In. | In. | In. | In. | In. | In. |
| January | | | | | | | | | |
| February | 0.03 | | | 0.69 | | | | | |
| March | 0.69 | | | | 0.20 | | | 0.64 | |
| April | | 0.24 | 0.45 | | 0.74 | 2.60 | | 0.10 | 0.35 |

| May | 3.48 | 0.87 | 0.16 | 7.71 | 0.64 | 0.04 | 3.69 | 0.10 | 3.20 |
|-----------|-------|-------|-----------|-------|-------|-------|-------|-------|-------|
| June | 10.10 | 8.51 | 1.12 | 9.20 | 3.99 | 0.76 | 4.16 | 1.74 | 0.53 |
| July | 5.74 | 5.47 | 8.58 | 2.87 | 4.03 | 9.95 | 2.45 | 1.01 | 2.05 |
| August | 11.43 | 0.63 | 5.62 | 8.66 | 0.48 | 4.56 | 3.69 | 0.90 | 1.0 |
| September | 1.13 | 3.63 | 2.32 | 2.45 | 7.24 | 2.34 | 1.09 | 4.09 | 3.38 |
| October | 2.28 | 4.34 | 2.38 | 0.80 | 4.02 | 4.04 | 2.37 | 4.47 | 1.22 |
| November | 0.61 | 0.30 | 0.29 | 1.71 | 0.89 | 0.31 | 0.24 | 0.57 | 0.28 |
| December | | | | | | | | | |
| Total | 34.80 | 24.68 | 20. 90 | 33.62 | 22.23 | 24.60 | 17.69 | 13.62 | 12.01 |

| MONTH. | KASU | JRDI, 4 MILE | 45TH | KEDO | GAON, MILE. | 60TH | PA'TAS, 70TH MILE. | | |
|-----------|-------|-----------------|-------|-------|----------------|-------|-----------------------|-------|-------|
| | 1879. | 1880. | 1881. | 1879. | 1880. | 1881. | 1879. | 1880. | 1881. |
| | In. | In. | In. | In. | In. | In. | In | In. | In. |
| January | | | | | | | | | |
| February | 0.03 | | | | - | 1 | 0.04 | 1 | |
| March | - | | | 0. 04 | 0.42 | 1 | 1 | 0.19 | |
| April | I | | | 1 | 1 | I | 1 | 0.07 | 0.16 |
| May | 2.54 | 0.23 | 0.69 | 2.67 | 0.72 | 2.28 | 4.29 | 0.75 | 1.82 |
| June | 4.60 | 1.79 | 0.44 | 5.68 | 2.28 | 0.42 | 9.41 | 1.69 | 3. 63 |
| July | 5.28 | 0.50 | 1.68 | 2.90 | 0.30 | 1.02 | 4.57 | 0.46 | 2.11 |
| August | 3.37 | 0.22 | 1.24 | 2.84 | 0.09 | 1.33 | 5.00 | | 1.18 |
| September | 0.25 | 2.15 | 2.75 | 0.08 | 6.98 | 4.99 | 0.86 | 8.19 | 4.89 |
| October | 1.36 | 1.55 | 2.37 | 2.18 | 2.40 | 2.56 | 2.38 | 2.61 | 1.84 |
| November | 0.12 | 1.0 | 0.61 | 0.02 | 377 | 1.65 | 0.85 | 2.61 | 2.00 |
| December | | | | | | | | | |

| Total | 17.55 | 7.44 | 9.78 | 16.41 | 16.96 | 15.06 | 27.46 | 16.58 | 17.63 |
|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | | |

The left bank canal is eighteen miles long, passing a short distance beyond Kirkee. It commands an area of 3500 acres and the full supply discharge at the head is 38.5 cubic feet the second. The area which the complete scheme commanded was thus 150,700 acres which by shortening the right. bank canal has been reduced to 97,580 acres. Besides providing water for this parched tract of country, the work furnishes an abundant supply of pure drinking water to the city and cantonment of Poona, the Powder Works at Kirkee, and the numerous villages along the course of the canals. [The Poona Municipality pays £1000 (Rs. 10,000) a year for the supply of about 750,000 gallons daily delivered at the canal. bank. This supply is practically unlimited. Any excess is charged $4\frac{1}{2}d$. (3 as.) the 1000 gallons. The following are the results of analyses of the water made by the Chemical Analyser during the years 1878, 1879, and 1880.

Mutha Canals Water, 1878.1880.

| | SOLIDS. | CHLO- RINE. | | ALBU. MENOID AMMO. NIA. | REMARKS. |
|---|-----------------|----------------|---------|----------------------------------|--|
| | Grains Gallo | - | Parrs p | er Million. | |
| No. 1. Taken from the canal near head-works at 4 P.M. 11th June 1878. | 7.70 | 0.42 | 0.10 | 0.07 | Sediments, In Nos. 1 and 2, small in quantity; contain |
| No. 2. Taken from the canal near St. Mary's Church, Poona, 10 A.M. 12th June 1878. | 5.85 | 0.42 | 0.04 | 0.06 | vegetable debris, paramacia, and rotifers. In No. 3, very scanty, only. vegetable debris; no |
| No. 3. Taken from dispense | 5.60 | 0.42 | 0 06 | 0.06 | infusoria. |

| reservoirs at 10 A.M. 12th June 1878. | | | | | |
|---|------|------|------|------|--|
| No. 1. Taken from the canal near head-works at 6 P.M. 20th March 1879. | 5.60 | 0.42 | 0.04 | 0.12 | Sediments. In |
| No. 2. Taken from the canal near St. Mary's Church at 6 A.M. 21st March 1879. | 5.25 | 0.42 | 0.04 | 0.12 | No. 1 vegetable debris, paramacia. In No. 2 the same but scanty. In No. 3 vegetable |
| No. 3. Taken from dispense reservoirs at 6 P.M. on 21st March 1879. | 5.60 | 0.42 | 0.02 | 0.08 | debris only. |
| No. 1. Taken from the canal near head-works at G. P.M. on 23rd January 1880. | 4.20 | 0.70 | 0.05 | 0.10 | <i>Sediments.</i> In |
| No. 2. Taken from the canal near St. Mary's Church at 6 A.M. 24th January 1880. | 3.50 | 0.70 | 0.05 | 0.11 | Nos.1, 2. and 3: all scanty, chiefly vegetable debris with confusoria, diatoms, and paramacia; a few |
| No.3. Taken from the canal from distribution pipe in Poona at 6 P.M. on the 24th January 1880. | 4.90 | 0.70 | | 0.03 | rotifers in No. 2. |

]

Lake Fife is formed by a masonry dam founded on solid rock. The dam is of partly coursed and partly uncoursed rubble masonry and is one of

the largest works of its kind in the world. Exclusive of the waste weir which is 1393 feet long, the dam is 3687 feet long and rises ninetynine feet above the river bed; the greatest height above the foundation level is 107 feet. The crest of the waste weir is eleven feet below the top of the dam. The contents of the reservoir are 4911 millions of cubic feet and the area of the water surface is 3535 acres or 5½ square miles. To gain sufficient elevation to command the station of Poona and the country beyond, the bed of the canals is fixed at fifty-nine feet above the river bed or bottom of the reservoir. The volume of water stored above the canal level is 3161 millions of cubic feet. At the site of the dam the river has a catchment area of 196 square miles. During an average season it is calculated that the reservoir will fill sixteen times. The canals are completely bridged and regulated throughout. The right, bank canal is navigable in the ten miles to. Poona. In the tenth mile the water, supply for the city is drawn off. To avoid interfering with the buildings and the parade. ground, the canal is carried through the station of Poona in two tunnels. On leaving the first tunnel in the centre of the cantonment, there is a drop in the canal bed. By means of an undershot wheel this fall is used to drive pumps for raising the water for the supply of the cantonment into the settling tanks, filter beds, and covered dispensereservoirs of the high and middle service systems. From the canal itself low service mains and branches are led off. For irrigation beyond Poona there is provision for complete distribution. The total estimated cost of the works, including the Poona water-supply and indirect charges, that is capitalization of abatement of land revenue leave and pension allowances and interest on direct outlay, is £937,400 (Rs. 93,74,360). The works were partly opened in November 1873. Enough of the dam and was be weir was completed to store the water of the lake twelve feet above the level of the canal sluices and the canal was nearly finished to Poona. At first water was supplied only for house purposes in Poona. In February 1874 it was made available for crops, the area under command up to Poona being 30 10 acres. Before June 1874, the depth of storage was increased to fourteen feet and the distribution arrangements in the station of Poona were begun, and with the exception of the high service distribution were completed during the two following years. By 1877-78 the depth of storage was increased to twenty-five feet. The right-bank canal earthworks wore completed as far as the sixty-fourth mile, but water was admitted only as far as the forty-fourth mile. By the fifteenth of January 1878 the eighteen miles of the left-bank canal were opened commanding 3500 acres, and the high service distribution for water-supply to the station of Poona was completed. In 1879-80 the parapet of the dam at Lake Fife and the earthwork on the rear side of the dam were completed.

The unfinished parts of the waste weir were raised by temporary earthen banks so as to impound water up to the full supply level, twenty-nine feet above the sill of the sluices. The masonry works on the right-bank canal were completed and water admitted as far as the sixty-fifth mile. By 1882 the waste weir was completed with the exception of 500 feet at the west end, which was one foot below full supply level; the masonry works of the seventh portion to Patas were completed and the whole of the 691/2 miles of the right-bank canal were made available for use, thus practically completing the work. The following statement compares the areas irrigated and assessed, and the actual revenue, working expenses, and net revenue during the nine years ending 1881-82:

MUTHA CANALS RECEIPTS, 1873-1882.

| VEAD | AREA | | ASSESSMI | ENT. | |
|---------|---------|--------------|-------------|--------|--------|
| YEAR. | WATERED | Water Rates. | Town Water. | Other. | Total. |
| | Acres. | £ | £ | £ | £ |
| 1873-74 | 41 | 16 | | 21 | 37 |
| 1874-75 | 85 | 36 | 2300 | 207 | 2542 |
| 1875-76 | 732 | 303 | 4034 | 94 | 4431 |
| 1876-77 | 2034 | 1137 | 5277 | 55 | 6490 |
| 1877-78 | 5361 | 2275, | 6538 | 54 | 8866 |
| 1878-79 | 4913 | 2899 | 5850 | 39 | 8789 |
| 1879-80 | 7319 | 4995 | 6124 | 71 | 11,190 |
| 1880-81 | 12,201 | 5534 | 6080 | 119 | 12,334 |
| 1881-82 | 8973 | 6079 | 6990 | 130 | 13,199 |
| Total | 41,662 | 23,274 | 43,813 | 790 | 67,878 |

MUTHA CANALS RECEIPTS, 1873-1882— continued.

| YEAR. | | | Rec | eipts | | CHARGES. |
|-------|-------|------|--------|--------|----------|----------|
| TEAK. | Water | Town | Other. | Total. | Savings. | CHARGES. |

| | Rates. | Water. | | | | | |
|-------------|--------|--------|-----|--------|--------|--------|--------|
| | £ | £ | £ | £. | £ | £. | £ |
| 1873- 74 | 1 | | 21 | 21 | | 21 | 4 |
| 1874- 75 | 16 | 537 | 206 | 759 | 2618 | 3377 | 1474 |
| 1875- 76 | 81 | 2337 | 05 | 2514 | 1931 | 4415 | 1840 |
| 1876- 77 | 269 | 3256 | 43 | 3569 | 1564 | 5133 | 2378 |
| 1877- 78 | 1065 | 10,931 | 60 | 12,056 | 1326 | 13,382 | 3645 |
| 1878- 79 | 2519 | 6157 | 39 | 8716 | 2046 | 10,762 | 4388 |
| 1879- 80 | 3989 | 5872 | 69 | 9930 | 2047 | 11,977 | 4458 |
| 1880- 81 | 4321 | 6799 | 120 | 11,241 | 1768 | 13,009 | 5561 |
| 1881- 82 | 7232 | 6798 | 131 | 14,160 | 1960 | 16,129 | 6583 |
| Total | 19,494 | 42,687 | 784 | 62,966 | 13,269 | 78,235 | 30,331 |

The following statement gives a comparison of the area watered and the rainfall during the same period:

MUTHA CANALS IRRIGATION AND RAINFALL, 1873-1882.

| | I | IRRIGATION. | | | RAINFALL. | | | | | | |
|-------|--------|-------------|--------|--------|-----------|--------|--------|-------|--------|--|--|
| YEAR. | | Lata | Total | AT P | OONA | ٨. | AT P | A'TAS | 5. | | |
| | | Late. | Total. | Early. | Late. | Total. | Early. | Late. | Total. | | |
| | Acres. | Acres. | Acres. | In. | In. | In. | In. | In. | In. | | |
| 1873- | | 44 | 44 | 25.00 | 1.80 | 20.80 | 12.71 | 1.47 | 14.18 | | |

| 74 | | | | | | | | | |
|-------------|------|------|--------|-------|------|-------|-------|------|-------|
| 1874- 75 | 1 | 84 | 83 | 28.61 | 6.27 | 31.88 | 22.61 | 1.45 | 24.06 |
| 1875- 76 | 401 | 331 | 732 | 33.19 | 1.59 | 34.78 | 7.92 | 4.49 | 12.41 |
| 1876- 77 | 288 | 1716 | 2034 | 14.28 | 0.52 | 14.80 | 5.97 | 6.35 | 12.32 |
| 1877- 78 | 2405 | 2866 | 5361 | 14.31 | 4.13 | 18.44 | 9.72 | 6.33 | 16.05 |
| 1878- 79 | 2225 | 26S8 | 4913 | 25.4 | 6.51 | 31.91 | 22.00 | 3.58 | 25.58 |
| 1879- 80 | 3332 | 3987 | 7319 | 23.27 | 2.58 | 25.85 | 19.90 | 3.23 | 23.13 |
| 1880- 81 | 5966 | 6235 | 12,201 | 15.74 | 4.91 | 20.65 | 10.34 | 5.23 | 15.57 |
| 1881- 82 | 4450 | 4517 | 8973 | 17.61 | 4.38 | 21.99 | 11.21 | 3.81 | 15.05 |

In 1880-81 the area watered was sixty-six per cent greater than in 1879-80. This was partly due to short rainfall but mostly to the extension of distributing channels. In 1880-81 the crops irrigated under the canals were cereals 8339 acres, pulses 967 acres, sugarcane 1966 acres, and other garden produce 929 acres. The irrigation rates at present in force belong to five classes with an acre charge on the first class of £1 to £2 10S. (Rs. 10.25), on the second of 8s. to 10s. (Rs.4-5), on the third of 3s. to 4s. (Rs. $1\frac{1}{2}$.2), on the fourth of 6d. to 1s. (4-8 as.), and on the fifth of 9d. (6 as.). After the opening of the Mutha canals the amount of vegetables and green fruits booked at the Poona station rose from 4574 tons (128,094 mans) in 1871 to 7008 tons (190,236 mans) in 1876. The first effect of the opening of the canal was that the people gave up their wells and took to canal water. Of ninety-nine wells on the lands commanded by the canal by the end of 1876 sixty-five had ceased to be used. Since its opening the sowing of babhul seed and the planting of trees along the banks of the canal have been steadily carried on. In some places the trees have grown freely and the line of the canal is marked by a belt of green. Other places are too rocky for trees. Still year by year as the sowing of babhul seed is persevered with the breaks in the line are gradually becoming fewer and shorter. The Mutha canals project is in every respect the most promising of the water works yet undertaken

in the Deccan. The rapid spread of irrigation has been satisfactory and there can be little doubt that it will ere long pay the interest on its borrowed capital. So much of the canal passes through crumbly trap or murum that loss from leakage is serious and somewhat interferes with the original estimate of the area which the canal can water. Besides the direct ' receipts the canal confers many indirect gains on the country through which it passes. Villages in which during the greater part of the year there was formerly a great scarcity of water have now an abundant supply for drinking and for cattle.

A white marble tablet with the following inscription cut in black letters, and a companior Marathi tablet, have been let into the bridge by which the right bank canal crosses the Sholapur road about thirty-eight miles east of Poona:

VR.ETI.

THE MUTHA CANAL

Supplied by Lake Fife situated 10 miles west of Poona, Extends to Fatas, in the Bhimthadi Taluka.

Its total length is 69½ miles.

The earthworks of this section, extending from 29 to $6\frac{1}{2}$ miles, afforded employment for the people during the Famine of 1876-77.

On an average, 10,000 people of all ages were employed daily for a period of fourteen months, the highest number on any one day being 21,000.

The expenditure was Es. 3,90,000

on wages and charitable relief,

and the value of the work executed was Rs. 2,17,000

The masonry works were subsequently completed,

and water was admitted up to the 65th mile

in September 1879.

William Clerke, M. Inst. C. E., Executive Engineer for Irrigation, Poona.

E. B. Joyner, C. E, Assistant Engineer, in immediate charge of the Works

Nira Canal.

[Contributed by Mr. J. E, Whiting, M.A., M. Inst. C. E., Executive Engineer for Irrigation Nira Canal, The Nira Canal is designed to irrigate the left bank of the Nira valley and a part of the Bhima valley near the meeting of the two rivers, to supply towns and villages along the valley with water for household purposes wherever the wells are insufficient or brackish, and to utilize the water power that will be generated at the head-works and near the tail of the canal at Indapur. In 1864 as part of his inquiry into the best means of protecting East Poona from famine Colonel Fife, R. E., organised surveys of the Nira river. These surveys showed that, by starting near Shirval about thirty-two miles south of Poona, a canal would reach the parts of Bhimthadi and Indapur which, chilly required water. Nothing further appears to have been done till January 1868, when, in consequence of a threatened failure of crops, a committee consisting of Colonel Francis, Survey and Settlement Commissioner Northern Division, Mr. J. E. Oliphant C. S., Collector of Poona, and the late Lieutenant Buckle, R. E., Executive Engineer for Irrigation, were appointed to consider what survey operations should be undertaken for irrigational works. This committee reported that the tract most deserving of attention was the part of Indapur which lies between the Bhima and the Nira. In this tract the annual rainfall was so uncertain and capricious that the crops frequently failed several years in succession; it might with reason be termed a drought-stricken region. In these opinions Mr. A. F. Bellasis, C. S. the Revenue Commissioner concurred and Mr. J. W. Hadow, C. S. Revenue Commissioner Southern Division, in forwarding Colonel Francis' report, speaks of Indapur as having a worse rainfall than almost any part of the Deccan or of the Bombay Karnatak, In consequence of these recommendations in 1868 the surveys of the Nira project were resumed by Lieutenant Buckle. At the close of 1868 the Mutha works required Lieutenant Buckle's whole attention, and early in 1869 Mr. J. E Whiting, M.A. M. Inst. C. E., was appointed to the survey under Colonel Fife's orders. Detailed surveys for the canal alignment, the choice of the site for the reservoir and the site for the

canal head works, together with the making of plans and estimates and writing the final report, occupied Mr. Whiting and his staff for two and a half years. During this period, in consequence of a severe drought, fifty per cent remissions were granted in forty-three dry-crop villages and twenty-five per cent in thirteen other villages of Indapur. The plans had been reviewed by the Chief Engineer, but further progress was stopped by order of the Government of India. Mr. Whiting was appointed Executive Engineer for Irrigation in Poona, and nothing more was done until the failure of rain in 1876. Towards the close of 1876 Mr. Whiting, with four of the staff that had formerly helped in making the Nira surveys, was sent to recover the old line and to modify the plans so as to make the work suitable for famine relief. Early in 1877 earthworks were opened for gangs sent by the Collectors of Sholapur, Satara, and Poona. The numbers rapidly rose from 5000 to 24,132 persons, who, with their sick and children, were employed or received relief on the Nira canal. Towards the end of 1877 as the famine was over relief-works were closed; but the high price of gram caused so much distress that for six months in 1878 relief-works had to be re-opened on the Nira canal and again on account of damage done to the crops by rats in 1879. The relief works were finally closed in March 1880. During twenty six months they had given employment to an average of 8096person of all ages Mr. Moore C. S. Collector of Poona Mr. Richey, C. S. acting Collector, and Mr. Robertson, C. S. Revenue Commissioner Central Division, urged the necessity of completing the works. Petitions from forty-six villages representing over 60,000 acres of land in Indapur were received praying for the early construction of the canal and promising to pay the water rates. The matter was strongly pressed by the Government of Bombay and their views were submitted by the Government of India to the Secretary of State in August 1880. Sanction to complete the head-works and the first thirty-five miles of the canal from ordinary funds was granted by the Secretary of State in November 1880. In 1881 the Government of India accorded sanction to the first two stages of the Nira canal project as a protective work at an estimated cost of £415,000 (Rs. 41½ lakhs). Of this £80,000 (Rs. 8 lakhs) had been spent. To complete the project funds were provided from the grant for Protective Public Works and the execution of the project was entrusted to Mr. Whiting, Executive Engineer 1st Grade, Mr. J. H. E. Hart being Chief Engineer for Irrigation.

The Nira canal lies along the left bank of the Nira river. It has a length of 103 miles exclusive of distributing channels, and commands 280,000 acres of arable land in ninety villages in the Purandhar, Bhimthadi, and Indapur sub-divisions. The works will furnish an

unfailing supply of water to 100,500 acres. The Nira and its three large feeders rise in the Sahvadris and up to the canal head have a catchment area of over 700 square miles. During the south-west monsoon, that is from mid-June to mid-October, the Nira continuously discharges far more water than can be used in the canal. It has also in ordinary seasons a considerable flow to the end of December. To ensure the supply during the rest of the dry season very extensive storage works were required. A reservoir nineteen miles long and with an area of 71/4 square miles, or nearly two square miles more than the area of Lake Fife, is to be formed on the Velvandi, a feeder of the Nira, at Bhatghar near the town of Bhor by a masonry dam over 3000 feet long and over 100 feet high. This lake will have a capacity of 4641 million cubic feet, which by the use of falling shutters designed for the weir can be increased to 5500 millions. This gives a storage cost of £18 2s. (RS. 181) per million cubic feet, a low rate compared with the cost in other reservoirs. Twenty large under-sluices are provided to carry off the early silt-laden floods. The headworks of the canal are at Virvadi in Purandhar, nineteen miles further down the river, where a weir of concrete faced with rubble masonry forty-two feet high and 2300 feet long and backed by subsidiary weirs about half its height has been built across the Nira and the Vir near their meeting. This will raise the water to the full supply level in the canal, to which it will be admitted by large iron sluice gates. The supply basin above the weir will extend about eleven miles to Shirval, which is half-way between Vir and Bhatghar, After leaving Vir the canal crosses the old Satara road about two miles north of the Nira bridge and passes above all the larger villages in the valley. These are, Vadgaon at the 26th mile, Korhale at the 29th mile, Pandar at the 35th, Malegaon at the 40th, Baramati at the 48th, Sansar at the 64th, Haturne at the 70th, Shegaon at the 81st, Gotundi at the 87th, and Nimgaon at the 92nd. Near Nimgaon the canal crosses the water-shed above the town of Indapur into the Bhima valley and ends at Bijavdi at the 77th mile of the Poona and Sholapur road. The Mutha right bank canal ends near the 40th mile of that road and the Shirsuphal and Bhadalvadi reservoirs with their distributaries have been constructed between the ends of the two chief irrigation canals. In addition to the Nira canal two large reservoirs have been designed, one just above the town of Indapur and the other at Vadapuri near Nimgaon. These have little or no natural catchments, but will be tilled from the canal during the south-west monsoon and will thus increase the supply available during the dry weather at the end of the valley most distant from the main reservoir at Bhatghar. A branch canal has also been proposed, which will leave the main canal near Pandar at the thirty-fourth mile, and cross the river Nira at Kamleshvar in order to water the droughtstricken sub-division of Malsiras in Sholapur on the right bank of the valley. These extra works and the necessary widening of the canal will probably be undertaken only if famine breaks out afresh and if employment is again required for the relief of neighbouring sub-divisions or if the demand for water under the canal exceeds the supply available from the first two stages, namely the Bhatghar reservoir and the present canal.

In many places the hilly nature of the ground has made the course of the canal winding. In several cases, as at Korhale, Malegaon, and Nimgaon, rocky spurs have been cat through to avoid long detours. At those places the cuttings are thirty-five feet deep at the centre and half a mile long. Many large watercourses had also to be crossed so that twenty aqueducts, ninety-four culverts, and nine over-passages had to be constructed. Of the watercourses the largest is the Karha, which drains 440 square miles and has a steep and generally rocky bed. The canal crosses it at the forty-fifth mile near Baramati by an aqueduct of thirteen spans of thirty feet and twenty-three feet headway. This is probably the most favourable crossing in India of a large and dangerous torrent by an aqueduct. The over-passages are of somewhat novel design and appear like huge inverts over which the streams are passed while the canal runs underneath, through double galleries arched across. In two of the over-passages, one near Vadgaon and one at Pandar, the inverts have a span of ninety feet. There are thirty-seven road and accommodation bridges and several foot and cattle bridges. Most of the aqueducts and culverts have been made so as to allow carts or cattle to pass under them, so that on an average there is some crossing provided at about every half mile of the canal. First class bungalows have been built at Bhatghar, at Virvadi, and at Baramati, and smaller bungalows at the Nira bridge, Vadgaon, Pandar, Sansar, Haturne, Gotundi, and Tarangvadi. The population of the valley has greatly decreased of late years, but the soil is generally good and capable of maintaining a much larger population than it now supports. It is expected that the first fifty-two miles of the canal will be opened so as to utilize the Nira water in the monsoon of 1884. There can be little doubt that when the valley is protected from drought capital will flow into it and enable the people to utilize the water to the utmost. It is hoped that this canal, whoso primary object is to protect the area under command from the effects of drought, will ultimately develope a net revenue more than enough to cover the interest on the outlay.

A white marble tablet with the following inscription cut in black letters and a companion Marathi tablet have been set at the canal headworks twenty miles cast of Bhatghar:

V. K. ET I.

THE NIRA CANAL.

Designed for the irrigation of the lands of 90 villages.

On the left bank of the Nira River.

Comprising a culturable area of 437 square miles.

Is 103 miles in length, excluding branches.

Its supply is rendered perennial by a storage lake at Bhatghar on the Velwandi river, 20 miles west of this place.

The canal was commenced for the employment of the people during the Famine in 1876-77.

For twenty-six months an average of 8096 persons of all ages were employed,

the highest number in any one day being 24,132.

The expenditure was Rs. 7,56,873 on wages and charitable relief.

The value of the work executed was Rs. 5,00,365.

On the cessation of the distress caused by the Famine and subsequent period of high prices, the works were suspended in March 1880.

They were resumed in January 1881, and the canal was first opened for irrigation in 1884. J. E. Whiting, M.A., M. Inst. C. E., Executive Engineer, Nira Canal.

[Mr. Whiting mentions the names of Messrs. E. Behrman, assistant engineer, D. Henry and Ravji Trimbak sub-engineers, Rokmaji Narayan, supervisor, and Ganesh Janardan and Narayan Vishnu

overseers. The chief contractor was a Nagar Brahman of Surat named Navtamram Uttamram.

Reservoirs.

Kasurdi.

At Kasurdi in Bhimthadi, twenty-four miles east of Poona, at a cost of £1182 8s. (Rs. 11,824) a reservoir was made in 1838 under the advice of the Revenue Commissioner Mr. Williamson. In 1843, the whole of the earthen embankment was washed away, but the masonry was unhurt. Its restoration was begun by the irrigation department as a famine relief work in 1864, and it was completed as an ordinary work when the necessity for relief ceased. It is a small reservoir, dependent for its supply on the local rainfall over an area of six square miles. It was finished to test the value of reservoirs which depended for their supply on local rainfall. The restored reservoir holds 14½ millions of cubic feet of water and is furnished with two distributing channels commanding 585 acres. The work was finished in 1869 and the pond was filled for the first time in August of that year. The total cost was £4749 12s. (Rs. 47,496), that is at the rate of £8 (Rs.80) on every acre under command. From 1869 to 1883, the supply has been most uncertain. In some years the reservoir has filled; in others it has remained almost dry. The irrigation rates at present in force are the same as those sanctioned for the Mutha canal beyond the eight mile radius from Poona, Babhul seed has been sown below the embankment and has thriven fairly. A few trees of other kinds have also been planted. As this work depends for its supply on a restricted area in a tract of very uncertain rainfall, the results can never be satisfactory.

Matoba.

in the village of Pimpalgaon in Bhimthadi, twenty-eight miles east of Poona, near the railway station of Yevat, a reservoir called Matoba after a neighbouring temple of Matoba or Matakmal, was made in 1876-77. The reservoir is designed to store the surplus waters of the right bank Mutha canal and water the laud between it and the Mutha-Mula river. At full supply level it has an area of 470 acres and a capacity of 229 millions of cubic feet. The site was chosen and surveyed by Colonel Fife, R. E., in 1863, when examining the best means for irrigating the country east of Poona. As the Mutha canal project was undertaken the scheme for the Matoba reservoir was laid aside. In 1876-77, when famine relief works were started, the

Executive Engineer for Poona, Mr. Clerke, revised the plans and estimates and recommended the project because as the Mutha rightbank canal passes close above the site of the lake it would form an auxiliary to the canal, whose surplus waters might during the southwest monsoon be stored for use in the dry season. The work was begun in December 1876 and completed almost entirely by famine labour in August 1877. The reservoir is formed by an earthen dam 6095 feet long and forty-eight feet in greatest height. The full supply level is nine feet below the top of the dam. The waste weir on the left flank of the dam is 600 feet long. The outlet whose level is ten feet above the bottom consists of a masonry culvert under the dam where it abuts on the right flank and three twelve-inch iron sluice valves of the ordinary pattern in use for water-supply mains. These valves are attached to lengths of pipes set in concrete at the inner end of the culvert and are worked by iron rods laid along the dam slope. The main distributing channel is 114 miles long and is capable of discharging twenty-six cubic feet a second. It has a main branch to the village of Pimpalgaon which again divides into two branches of a total length of six miles. Of 8550 acres under command, 3600 acres are in Pimpalgaon, 2900 in Delavdi, fifty in Khatbai, and 2000 in Pargaon. The catchment area is only ten square miles and the average rainfall under twenty inches, but with the aid of the surplus water from the right bank Mutha canal the monsoon demand for water can be supplied and the reservoir can always be left full in October when the south-west monsoon closes. A regulating bridge is built across the Mutha canal at the 4934th mile from Poona by which the water in the canal can at any time be turned into the reservoir. From the fifth of August 1878 water from the Mutha canal began to be available. The irrigation rates at present in force are the same as those sanctioned for the Mutha canals beyond the eight mile radius from Poona. For a length of four miles the boundary of the land taken for the reservoir is fenced with aloe. The margin above the water level has been sown with babhul seed, which at the upper end has grown remarkably well.

A white marble tablet with the following inscription carved in black letters and a companion Marathi tablet have been set at the west end of the dam:

V. R. ET I.

THE MATOBA TANK

Designed for storing surplus water from the Mutha Canal

and irrigating the tract of land lying between
the Tank and the Mutha-Mula River
Has an area of 470 acres and a capacity of
229 millions of cubic feet.

The earthworks of the dam were commenced for the employment of the people during the Famine of

1876-77.

For eighteen months they afforded employment for, on an average, 3100 people of all ages, the highest number on any one day being 8300.

The expenditure was Rs. 1,98,000 on wage.; and charitable relief, and the value of the work executed was Ra. 1,40,000.

The Tank was completed and opened for irrigation in October 1873.

William Clerke, M. Inst. C. E., Executive Engineer for Irrigation, Poona.

Shirsuphal

One and a half miles above the Bhirathadi village of Ravangaon, fifty miles east of Poona, on the Rotimal, a small feeder, is the Shirsuphal reservoir called after the village of that name three miles further up the stream. The reservoir was designed to water the lands on the left bark of the Rotimal. At full supply it has an area of 834 acres and a capacity of 307 millions of cubic feet. In January 1877, when it became necessary to provide work for the destitute people of East Poona, plans and estimates were prepared by Mr. Clerke the Executive Engineer for Irrigation. Work was begun in February 1877 and finished

in October 1878. The dam is of earth, 2200 feet long and fifty-three feet in greatest height. The full supply level is eleven feet below the top of the dam, and the outlet level is eleven feet, above the bottom of the reservoir. The waste weir channel, which is on the right flank of the dam, is 300 feet wide. The outlet, a masonry culvert under the dam where it abuts on the right flank and three twelve-inch iron sluice valves, is of the same pattern as that described for the Matoba reservoir. The canal leading from the reservoir is 12½ miles long, with a fall of three feet a mile and a discharging capacity at the head of thirty cubic feet; a second. Of 4500 acres under command 800 are in Ravangaon, 1500 in Kharki, and 2200 in Chincholi. The catchment basin has an area of twenty-three square miles, with an average rainfall of eighteen to twenty inches. The reservoir tills only during years in which the rainfall is considerably above the average, but the additional storage capacity admits of the supply of favourable years being stored for use in years of short rainfall and thus ensures a large average supply. In 1880-81 the irrigated crops were cereals 661 acres, pulses 55 acres, sugarcane 4 acres, garden produce 4 acres, and condiments It acres. The water rates at present in force are based on the classified lists sanctioned for the Mutha canals. There are five classes with an acre charge on the first class of £1 (Rs. 10), on the second of 8s. (Rs. 4), on the third of 4s. (Rs. 2), on the fourth of 2s. (Re. 1), and on the fifth of 8s. (Rs. 4). The margin of the reservoir above the line of full supply has been fenced with aloe and sown with babhul seed, but owing to the stony soil the babhul has not done well. Babhul seed sown below the dam has thriven remarkably well and now forms a belt of good-sized trees. As the rainfall on the catchment is very uncertain the supply of water is precarious and in some years the irrigation has to be much restricted; this is to be regretted as the holders of the land commanded by the reservoir have shown themselves anxious to obtain a supply of water.

A white marble tablet with the following inscription cut in black letters and a companion Marathi tablet have been set at the west end of the dam:

V. B. ET I.

THE SHIRSUPHAL TANK.

Designed for the irrigation of the lands lying on the Left Bank of the Rotimal Nala,

Has an area of 834 acres and a capacity of 367 millions of cubic feet.

The earthworks of the dam were commenced for the employment of the people

during the Famine of

1876-77.

For sixteen months they afforded employment for, on an average, 2100 people of all ages, the highest number on any one day being 9000.

The expenditure was Es. 1,58,000 on wages and charitable relief,

and the value of the work executed was Es. 1,45,000.

The Tank was completed

and opened for Irrigation in October 1878.

William Clerke, C. E., Executive Engineer for Irrigation, Poona Division.

Bhadalvadi.

In the Indapur village of Bhadalvadi, on a feeder of the Bhima, about sixty four miles east of Poona, the Bhadalvadi reservoir wag begun as a relief work in the famine of 1876-77, and finished and opened for irrigation in May 1881. It was designed to water the lands of the villages of Daluj and Palasdev. At full supply it has an area of 335 acres and a capacity of 222 millions of cubic feet. It is formed by an earthen dam 2725 feet long and fifty-rive feet at its greatest height. The drainage area above the dam is twenty-three square miles. During the five years ending 1882-83 the average rainfall has been 21.53 inches. The waste weir on the left, flank is 400 feet long with a crest eleven feet below the top of the dam.

A white marble tablet with the following inscription cut in black letters and a companion Marathi tablet have been set at the north end of the dam:

V. E. ET I.

THE BHADALVADI TANK

Designed for the irrigation of lands in the villages of Daluj and Palasdev.

Has an area of 335 acres and a capacity of 222 millions of cubic feet.

The earthworks of the dam were commenced for the employment of the people during the Famine of

1876-77.

For twelve months they afforded employment for,
on an average, 1600 people of all ages,
the highest number on any one day being 5400
The expenditure was Es. 54,000
on wages and charitable relief,
and the value of the work executed was Rs 48,000

The Tank was completed

and opened for Irrigation in May 1881

William Clerke, M. Inst C. E., Executive Engineer for Irrigation, Poona.

The outlet, which is on the right flank of the dam, is of similar construction to those described in the Matoba and Shirsuphal reservoirs. Its sill is thirty-five feet below full supply level. From it a

canal or distributing channel, with, at the head a discharging capacity of fifteen cubic feet the second, is led 6¼ miles along the right bank of the stream. The area under command is 1900 acres. A distributing channel heading from the same outlet in the left bank of the stream is also projected. Its length will be 3½ miles and it will command 1100 acres. The work was opened in 1881. The irrigation rates are the same as those mentioned under the Shirsuphal reservoir.

Besides these works designed for irrigation, there are two large reservoirs at Katraj and Pashan and two more at Patas and Supa. The Patas and Supa reservoirs were made as relief works during the 1870-77 famine.

Katraj.

In the high land about two miles to the north of the; Katraj pass and about six miles south of Poona is the Katraj lake, which was built in 1750 by Peshwa Balaji Bajirao. It covers an area of 5½ acres and has a dam of rubble masonry 1000 feet long and forty feet high. It holds water all the year round and has a greatest depth of forty feet. The water is used only for drinking. Masonry conduits lead to Poona where there are cisterns or *hands* in different parts of the town.

Patas.

In the Bhimthadi village of Patas, about thirty-seven miles east of Poona, a reservoir was begun as a famine relief work in January 1877 and finished in 1879. It is a small reservoir with a full supply area of forty-six acres, a capacity of fifteen millions of cubic feet, and a catchment area of three square miles. The earthen dam is 2900 feet long and twenty-nine feet in greatest height. The waste weir is 170 feet long and is seven feet below the top of the dam. The total cost was £3400 (Rs. 34,000). The site is very unfavourable and the cost is out of proportion to the capacity of the reservoir. Its only use is to provide water for house purposes and cattle in the village of Patas. It was carried out only to afford relief which was urgently needed.

Supa.

About one mile north-west of the Bhimthadi village of Supa and thirty-live miles end of Poona, the Supa reservoir was begun as a famine relief work in November 1876 and finished in 1877. An earthen dam is laid across a gap in an old embankment thrown up from the excavation of a small pond many years old. The total cost was £220

(Rs. 2200). This is a trifling work useful only for cattle. It was carried out solely to relieve distress in the immediate neighbourhood.

Pashan.

On a feeder of the Mula in the village of Pashan six miles west of Poona a reservoir was made in 1867-68 at a cost of £16,700 (Rs. 1,67,000) to furnish water for the station of Kirkee and Government House, Ganeshkhind. It is formed by an earthen dam 2750 feet in length with a greatest height of fifty-two feet. The waste weir is 400 feet long and its crest is ton feet below the top of the dam. The full supply area of the lake is 153 acres. Its available! capacity is seventy-three millions of cubic feet, and the catchment area is sixteen square miles. The water is led from the reservoir in a ten-inch cast-iron main which goes through the Government House grounds, by the cantonment of Kirkee, on to the Powder Works. The water is fully distributed in Government House and in Kirkee barracks and cantonment. It was of great use before the left bank Mutha canal was made.

IRRIGATION

WEEDING.

There are two modes of weeding, by a sickle or *khurpe* which is generally practised in hill-lands, and by a small hoe or khulpe. When the crop is six inches high, to clear it of weeds, the small hoe or kulpe is usually used twice at intervals of ten to twelve days. The hoe is drawn by two muzzled oxen and is driven so that the row of springing crop passes through the space between the blades. It is often used double, that is one pair of oxen draw two hoes. The uprooted weeds are gathered and are either thrown away or left to rot on the spot. Besides lessening the drain on the soil, weeding loosens the soil and enables it to take in and hold more moisture. The crop roots have free scope and the plants grow-vigorously. If weeding is neglected the surface grows hard and crusted and the water failing to soak in washes away the particles of soil. Cold-weather crops seldom want weeding, as the ground is both too carefully cleaned and too dry to yield any large supply of weeds. Malis are the cleanest weeders; Kunbis, especially in the east, are careless.

WATCHING,

From the time the grain forms, to drive off birds the crop is watched from a wooden shed called *mala* generally set on a platform or in a tree about ten feet from the ground. The watcher, who is generally a boy, shouts and throws stones from a sling called *gophan*.

REAPING,

When ripe the crop is either reaped by the sickle or *vila* or pulled up by the roots, and bound in sheaves. It is carried in carts to the thrashing-floor or *khale* and stored there till it is dry. The largest and best filled heads are separated and their grain kept for seed. In the sowing season this seed grain realizes half as much again as ordinary grain.

THRASHING.

The crops are taken in carts to the thrashing-floor or *khale*. The thrashing-floor is made in the hardest part of the field or sometimes near the village site, by wetting and beating the ground till it is hard and smooth, and then smearing it with cowdung. An upright post or *tivda* is set in the centre and a sheaf of the crop is tied to the top of the post. In the case of Indian millet or *jvari* and spiked millet or *bajri* the heads of grain are broken off by women and thrown round the central post five or six inches deep; of wheat and rice the whole plant is thrashed; and of *math*, *mug*, and other pulses sometimes the whole plant and sometimes only the stalks are thrashed. Six, eight, or more muzzled oxen are tied to the pole, half on one side half on the other, facing opposite ways, and driven round and round treading out the grain. *Tur* pods and barley beads are beaten against a log of wood so that the grain falls on the floor.

WINNOWING.

The grain is winnowed from the chaff with the help of the wind. The chaff is filled into baskets which are handed by one man to a second man who stands on a high three-legged stool called *vavdi*, and empties the basket slowly with a shaking motion. The heavy grain falls, the light grain and chaff are blown aside. A man at the foot of the stool sweeps the chaff from the edge of the grain with a small broom called *hatni*. To cleanse it still further the grain is afterwards passed through a sieve or *chalan*.

STORING.

In the east grain is often stored in underground chambers or *pevs*. Grain is also of ten in the east and always in the west stored in large cylindrical baskets called *kanings* or *kangis* made of *nirgundi* or *tur* twigs and smeared inside and out with cowdung. The surface of the gram is also thick plastered with cowdung and the basket is covered with a conical thatch roof. In the west, the baskets stand at some little distance in front of the house for safety from fire, with a few loose stones under them to keep out white ants. In the east they usually stand in the veranda of the house.

MIXED SOWINGS.

In the lighter eastern soils as many as six grains may be seen growing together year after year. A field with one crop is seldom seen. In the May or June sowings bajri, tur, ambadi, gingelly seed, rala, mug, and shalu jvari may all or almost all be seen together. In the late crops, safflower is almost always mixed with the staple crop gram or shalu jvari. Linseed is sown in rows with gram and wheat. The practice of mixed sowings arises chiefly from the poverty which dares not risk the total failure of a single crop. It was fostered by a custom which prevailed under former Governments of attaching the staple crop until the assessment was paid, in such a case the Kunbi could still make something out of a mixed crop.

WOOD-ASH TILLAGE.

Wood-ash tillage, called *dalhi* or *kumri*, is confined to the hilly west. The word *dalhi* is taken from the small hill-side plots or *dalhas* where none but hand tools can be used. The spots cultivated are often extremely steep. Operations ore began in the cold weather by felling the brushwood and small trees and lopping the branches of the larger trees. At the end of the hot weather the dry branches are burnt and the ground is at once cleared and manured. After rain has fallen the soil is loosened with the hand hoe or *kudal* and the crop is planted or sown as the ease may be. *Khurasni*, *nagli*, *sava*, *vari* and *kodra* or *harik* are the crops. Tillage is generally continued for five years beginning with *khurasni* and ending with *kodru*. The subsequent fallow lasts ten to fifteen years. This form of tillage was never practised except by Kolis, Thakurs, and other half-wild tribes. It is now confined within very narrow limits.

ROTATION.

Rotation of crops is not unknown though the practice of mixed sowings robs it of half its value. In the lighter soils *ivari* and *bajri* mixed as above alternate, the plough being used after *jvari* on the borders of the west, and after bajri in the east. Bajri is often grown three or tour years running; *ivari* is seldom repeated so often as it takes more out of the ground. In the heavy deep soils cold-weather millet or shalu *jvari* is grown for several years running, relieved sometimes by a crop of gram or wheat. Where wheat is the staple late crop it alternates with gram, but is not grown year by year. In the west the rotation in early or kharif lands is more elaborate. Fallow land is ploughed and sown with khurasni the first year, with nagli the second year, and with vari, sana, rala, bhadli, or kodru the third and fourth years. In the fifth year khurasni is again sown and the land is left fallow for four or five years. The land is ploughed before each crop, but, except in the *nagli* and *vari* seed beds no manure is used. This course of crops is sometimes cut short by sowing *khurasni* in the third year succeeded by the fallow. It is also occasionally prolonged a year or two with similar crops, khurasni being always the last. Under the most favourable circumstances the rotation in gardens lasts three years. The course begins in July with tag or hemp, Hibiscus sativus, a crop which requires water about once in fifteen days. In October, after the larger plants have been picked and set aside for rope-making, the rest is ploughed into the ground as manure. The land is then flooded and left for twenty days, when it is ploughed twice and prepared for sugarcane. When the cane begins to sprout val pulse is sown. The sugarcane is cut. in the following March, the leaves are lopped on the spot and burnt as soon as they are dry, and the land is flooded. The land is ploughed with shallow furrows and val is sown as fodder. The val is taken up before July when the land has to be prepared for kamod rice. The rice is sown in July and cut in December. After two or three ploughings wheat is sown and cut in the end of April. The land is now ploughed and lies uncropped till July when perhaps earthnuts are planted and dug up in October. This order is liable to many changes' acceding to the varying qualities of soil, water-supply, and the circumstances and opinions of the husbandman. Sometimes methi, that is Greek grass, or khurasni are ploughed into the soil instead of tug or hemp, and a four-year or even a five-year rotation is followed. In well-watered lands a three-year rotation is not common, for, in addition to the expense of well irrigation, the water-supply lacks the power supplied by the combination and co-operation which are distinctive of canal watered lands.

FALLOWS.

In the plain parts of the district land is sometimes left fallow, but it is a question how far husbandmen leave plain land fallow simply for to rest it. The fallow in wood-ash or *dalhi* land is certainly with the object of resting the land and lasts ten to fifteen years.

GARDENING.

[Mr. G. M. Woodrow, Superintendent Botanical Garden, Poona.] The moderate climate and fertile soil of the Poona district offer every inducement to gardening. Yet the area under gardens is not large. Of late near Poona the best garden soil to a great extent has been given to the less troublesome and very profitable cultivation of sugarcane. This land will probably remain under sugarcane until it is exhausted of soluble silicates when it will doubtless be given to garden crops until it is again fit to bear sugarcane. The best garden soil is a dark brown friable loam lying on loose open trap rock. In such positions, if walls have been built to keep the soil over three feet deep, and water is available, it bears excellent crops of cabbage, cauliflower, beet, encumber, radish, spinach of several kinds, and other nutritious vegetables, and custard apples, pomegranates, oranges, guavas, mangoes, plantains, and other fruit. Another very similar soil is found on river banks. This is also a dark-yellow or brown loam but its particles are finer and in consequence it is sometimes apt to hold too much water and to stick in hard lumps. Its situation makes it liable to floods, and it contains a very small proportion of lime. Still on the whole it is an admirable soil, specially suited for popai and plantain trees and flowering shrubs, and if it is some height above Hood level is excellent for orange and mango trees. The black soil overlying open calcareous marl is also a valuable garden soil. With liberal manuring and watering it bears first-rate vegetables and flowers, but is less suited to fruit trees as they are apt to run to wood.

In preparing the soil even in market gardens the native plough is the favourite tool. When drawn by four pairs of willing oxen, and when the furrows cross and recross and pass as deep as fifteen inches below the surface, the native plough is remarkably efficient. Though it is costly to work it can be used during many days on which European and American ploughs must remain idle. A stout hoe, or *pavde* and a small weeding-hook or *khurpe* almost complete the list of market garden tools; while in ornamental grounds the pick, rake, Dutch hoe, pruning shears, budding knife, watering pot, syringe, lawn-mowing machine, and other tools may be seen in use. The spade is seldom employed. The soil is so sticky when wet and so hard when dry, that the spado cannot often be used with advantage. In watering a garden plot the

ground is laid out in ridges about fifteen inches apart and ten inches high, and the hollow between is flooded. The ground is also arranged in flat beds about ten feet by ten feet divided by one ridge or by a pair of ridges. The pair of ridges forms a water channel; and the single ridge separates one line of beds from the next line. The quantity of water given weekly averages in dry weather eighty tons the acre to plantains; sixty tons to cabbage, cauliflower, and other quick-growing garden crops; and forty tons to rose trees and similar crops. According to the age of the plant and the nature of the soil five to fifteen days pass between the waterings.

The chief garden manure is the ashes of cowdung cakes mixed with goat's dung and vegetable refuse. When kept in a pit so that it may be moist and yet not have its soluble constituents washed away by rain, this is an excellent manure and is applied to all garden crops. Poudrette prepared by mixing fresh nightsoil with dry cowdung and wood-ashes has of late come into general use. It is specially suited for quick-growing leaf or root crops such as cabbage, cauliflower, potatoes, plantains, and sugarcane, and for maize and flowering plants which require regular watering Cowdung mixed with vegetable refuse which has been kept moist until it is well decayed is perhaps the safest and most generally useful garden manure. If the cattle are fed with oil-cake or grain it is particularly rich; in any case it is safe and gentle and can be used without fear of ill effects. Dried fish and castor-oil cake are also used for garden crops of rapid growth and are especially profitable when applied to cabbage, cauliflower, beet, and sugarcane.

The best seed-sowing season is about the end of June; the heavy rains with which the south-west monsoon bursts are over, and the air is cooled to a temperate warmth. At this season green fly and other insect pests abound, and so much care is required to protect young cabbage and cauliflower plants that their sowing is generally put off till August or September. Beans, beet, brinjals, carrots, celery, cress, knol-kohl, lettuces, mustard, onions, parsley, peas, radishes, spinach, and tomatoes among vegetables; and asters, balsams, convolvulus, nasturtium, pinks, phlox, and many other flower seeds, and the seeds of all local trees or trees belonging to districts with a similar climate may be sown about the end of June and repeated at intervals for succession up to September. In the hot air of October good seed often fails. November and December are the proper seasons for sowing lucerne and asparagus, for planting potatoes, and most of the vegetables and flowers in the previous list; also for larkspur and mignonette. In February and March several kinds of melons are sown in river-beds where water is near the surface. In April, early crops of

beet, celery, cucumbers, knol-kohl, lettuce, spinach, and tomato are sown. In sowing at this season great care must be taken to provide proper shade and moisture. If complete shelter from the impending burst of the south-west rains is available the April sowings may be repeated in May and annual flower seeds be sown in pots in moist shady places. Sweet-smelling flowers are grown to a large extent in market gardens. Among the commonest kinds are roses, jessamines called jai and mogra, the tuberose called gulchhabbu, chrysanthemums or *shevtis*, and oleanders or *kaners*. In rearing these flowers the chief rule is to keep the plant growing. With this object, as soon as one crop of flowers is gathered, the plants are pruned to within a few buds of the old wood, manure is dug in between the plants, and if the weather is dry the ground is watered. By this treatment three crops of flowers are raised in the year, but the plants soon grow weakly and have to be replaced, and the flowers are small, Michelia champaca son chapha, Plumieria acuminata chapha, Tagetes Marigold jhendu, Canna indica kardali, and Pandanus odoratissimus kevda are also grown as market flowers. The list of vegetables includes nearly all the chief kinds known in Europe. Several fine spinaches are raised from pokla Amaranthus, palak Chenopodium, methi Fcenumgraecum, and ambadi Hibiscus cannabinus. A large white radish or mula is grown for its roots, and the pods of the bhendi Hibiscus esculentus are a favourite crop. The chief fruit trees are the custard apple, pomegranate, fig, grape, mango, jambhul, bor, and orange. The betel-leaf pan Piper betel is also grown in large quantities.

Among the commonest ornamental plants are allamanda, alocasia, beaumontia, begonia, bignonia, bougainnillea, caladium, convolvulus, cupresses, ferns, geranium, gesnera, hibiscus, nelumbium, nymphea, palms, poivrea, quisqualis, rose, and tabernoemontana.

The art of grafting by buds called *handi*, and grafting by enarching or *kalam* are practised to a limited extent. The better kinds of rose, orange, pomelo, and *bor* may be budded at any time during the rainy or cold season if the sap is flowing freely. Enarching or grafting by approach is employed to propagate the finer kinds of mango, guava, and *bor*. The true graft, that is uniting a branch entirely removed from its parent tree on to a separate tree, is occasionally practised during November, to improve mango trees.

The use of the pruning knife is well understood. In pruning the rule followed in most cases is to cut back the short that has borne flowers or fruit to within a few buds from the base, and to remove weakly and decaying branches. Flowering shrubs of all kinds, the vine, and the fig

tree are regularly pruned by cutting back the branches which have fruited. Other fruit trees are kept free from unsound wood.

The moving of small plants which can be guarded from strong wind and from the sun is carried on during the rainy season with success. To move large shrubs or trees the best time of the year is between November and January. In spite of the dryness of the cold season large trees can be moved more easily in Poona than in Europe.

CROPS.

The following are the chief details of the leading local field and garden crops. [The following interesting statement was prepared by Captain Robertson, the first Collector of Poona in 1821. It shows the chief products of the district, the proportion each bore to the whole outturn, and the times of sowing and reaping:]

POONA CROPS, 1821.

| Pro- portion. | NAME. | Sown. | Reaped. |
|------------------|-----------------|--------------|-------------------------|
| 3/16 | Udid | May-June Bo. | August - September, |
| 1/3 | Mug | Do. | Do |
| 1/16 | Matki | Do. | Do. |
| 3/4 | Rala | Do. | Do. |
| 3/4 | Sava | Do. | Do. |
| 231/2 | Jvari | June-July | October. |
| 5½ | TUR | Do. | Do. |
| 271/2 | Bajri | Do. | Do. |
| 4 | Rice | Do. | October - November. |
| 1 | Nachni or Nagli | Do. | Do. |
| 1 | Til | Do. | September - October. |
| 1/2 | Bhadli | Do. | Do. |

| Van | Do | Do. |
|-----------------------|--|---|
| | | |
| Bnuimug | _ | December. |
| Wheat | September- October | February -March. |
| Gram | Do | Do. |
| Vatan | October - November | Do. |
| Masur | Do | Do. |
| Math | June-July | November. |
| Hulga or Kulith | Do. | Do. |
| Sugarcane | June and January | After twelve months. |
| Sweet Potatoes | All the year | After five months. |
| Oniurns and Garlic | January and August | April and December. |
| Chillies | June-July | January - February. |
| Butel Leaves | July-August | July- August. |
| Kaduval | April-May | July-August. |
| Carrots | October - November | January - February. |
| Kautti | May-June | September - October. |
| Barley | October - November | February - March. |
| Tobacco | June | November - December. |
| Chavli,Ambadi,Kardai, | | |
| Pavte, Alshi, Cotton. | | |
| | | |
| | Gram Vatan Masur Math Hulga or Kulith Sugarcane Sweet Potatoes Oniurns and Garlic Chillies Butel Leaves Kaduval Carrots Kautti Barley Tobacco Chavli,Ambadi,Kardai, | BhuimugDo.WheatSeptember-OctoberGramDoVatanOctober - NovemberMasurDoMathJune-JulyHulga or KulithDo.SugarcaneJune and JanuarySweet PotatoesAll the yearOniurns and GarlicJanuary and AugustChilliesJune-JulyButel LeavesJuly-AugustKaduvalApril-MayCarrotsOctober - NovemberKauttiMay-JuneBarleyOctober - NovemberTobaccoJuneChavli,Ambadi,Kardai, |

East India Papers, IV. 575.

Of cereals there are thirteen:

POONA CEREALS.

| No. | MARA'THI. | ENGLISH. | BOTANICAL. |
|-----|--------------------|----------------------|-------------------------|
| 1 | Bajri | Spiked millet | Penicillavia spieata. |
| 2 | Barti | | Paspalum scrobiculatum. |
| 3 | Bhadli | | Panieum pilosum. |
| 4 | Bhat | Rice | Oryza sativa. |
| 6 | Gahu | Wheat | Tritieum aestivum. |
| 6 | Harik or Kodru, | | Paspalum frumentaceum. |
| 7 | Jvari | Indian millet | Sorghum vulgare. |
| 8 | Makka | Indian corn or maize | Zea mays. |
| 9 | Nagli or Nachni | | Eleusine corocana. |
| 10 | Rala | | Psnicum italieum. |
| 11 | Satu or Jav | Barley | Hordeum hexastichon. |
| 12 | Sava | | Panieum miliaceum. |
| 13 | Vari | | Panieum miliare. |

1. Bajri, Spiked Millet, Penicillaria spieata, in 1881-82 covered 557,807 acres, 116,306 acres of them in Sirur, 108,599 in Junnar, 107,856 in Khed, 82,159 in Bhimthadi, 81,283 in Haveli, 32,840 in Purandhar, 24,136 in Indapur, and 4648 in Maval. Bajri with jvari is the staple crop of the district. It is grown all over the district but in small quantities in the hilly west of Junnar, Khed, Maval, and Haveli. It is a finer grain than jvari and requires more careful tillage. There are three varieties of bajri which can hardly be distinguished except by the initiated, gari or early, an inferior variety maturing in three and a half months; hali or late, a finer variety taking longer to mature; and sajguri, a quickly maturing variety with a smaller grain and grown chiefly under water. Bajri is sown in June or July usually in shallow black or light gravelly soils mixed with rala a coarse grain, math a

pulse, ambadi hemp, til sesamum, and tur a pulse. These grains are mixed in the following proportions: bajri 32, rala, math 4, ambadi 2, til 1, and tur 4. In rich soils tur is commonly sown in alternate rows with bajri and in poor soils a small legume called hulga or kulith Dolichos biflorus is always sown. A brown mould partly of red and partly of black soil is considered best for the growth of bajri. Two to two and a half pounds of the mixed seed is sown to the acre, the better the soil the less the seed. Bajri is seldom watered or manured. It depends less on the soil and more on the rain than *jvari*. It never yields so large a crop as *ivari* and where both can grow *ivari* is always chosen. Bajri wants more ploughing, manuring, and weeding than *jvari.* When the crop is four or five inches high the weeds and grass are cleared. A timely fall in August favours the growth of bajri, but, especially in shallow soils, too much rain settles at the roots and rots the stalks. Bairi is harvested in October and November, and from mid-October to mid-February the crops grown with it ripen, first the panic rala, then the pulse math, then the hemp ambadi, then the sesamum til, and last the pulse tur. The average yield of bajri on different unwatered soils in good and bad years is 300 to 400 pounds. The green ears are parched and eaten under the name of *limbur* or nimbur. The ripe grain is sometimes parched and made into lahis. Bajri is chiefly used as a bread grain, being kneaded with salt into round cakes about five inches across and half an inch thick. It is not liked by the working classes, but is the favourite food of the upper classes especially of the people of Poona. The stalks called *sarmad* are given to cattle, but unless trodden into chaff are held inferior to almost all other fodder.

- 2. Barti commonly barti, [Barti is said by Colonel Sykes to be the same as kodru or harik Paspalum frumentaceum. Inquiry in different parts of the Deccan satisfied Mr. Fletcher that the two are different.] Paspalum scrobiculatum or flavidum, is grown almost entirely in the east of the district, usually in separate furrows in fields of bajri. It is sown in June and July, and, without water or manure, ripens in October. The grain, which is white and round, is about the size of bajri, and grows on crooked finger-like side shoots which stand out at distinct intervals from the main stem of the ear. The grain has to be pounded to separate the husk, and is usually boiled and eaten like rice. It is much esteemed by the poor and is said to be most wholesome.
- 3. *Bhadli*, Panicum pilosum, is grown almost entirely in the east of the district and usually in the same fields as *bajri*. It is sown in June, and, without water or manure is reaped in October or November. *Bhadli* is much like red *rala* and is sometimes confounded with it. It is larger,

grows well in poorer soil, and the ripe ear is reddish brown and bristly, while the ripe *rala* is smooth and of a pale yellow. The grain is unhusked by pounding. It is eaten by the poor, chiefly in the east. It is sometimes boiled and eaten whole, and more rarely ground to flour. The straw is used as fodder.

4. Bhat, [The Marathi names of rice in its various stages are the seed bhat, the seedlings rop, the plants avan, the planted rice bhat, the husked seed tandul, the straw pendha or bhate, and the husk to which the grain clings konda Rice, Oryza sativa, in 1881-82 covered 47,885 acres, 21,104 of them in Haveli, 14,990 in Maval, 5998 in Khed, 4169 in Junnar, 1489 in Purandhar, 102 in Indapur, and 33 in Bhimthadi. It is the chief product of the west lands or Mavals, and is sometimes found in moist places in the eastern plain. About eleven kinds of rice are grown in the Poona district. One kind, kamod, the best rice in the district was brought by Dr. Gibson from Kaira in 1842. It is grown as a channel-watered crop. Four kinds, ambemohar, kale, raybag, and rajaval, are sown in late May in manured seed-beds, planted into wet fields in July-August, and reaped in late October. Five poor sorts, chimansal, dodke, kolambe, kothimbare, and varangal, are generally sown broadcast or by drill in poor rice-fields or on high-lying ground in June and reaped in September, [Bom. Gov. Rev. Rec. 1453 of 1843, 79.] Much the greater part of the Poona rice is grown under the planting system. In March or April a plot is chosen for the seed-bed either in the rice field itself or on higher ground close to the field and ploughed once and levelled. Cowdung, grass, and leaves are spread on the ground, a second layer is added of branches and brushwood covered with grass, and fine earth is sprinkled over all. These layers of cowdung, brushwood, and grass are called rab. The chief difference between rab and dalhi, the two forms of wood-ash tillage, is that in dalhi the bushes are burnt where they grow and in rab they are brought from somewhere else. In early May the brushwood is fired on the leeward side to ensure slow and thorough burning and the ashes remain guarded from the wind by the upper layer of earth. After the first rain in June the seed is sown broadcast and covered by the handhoe or kudal. In July, when five or six inches high, the seedlings are pulled up, tied in small bundles, and taken and planted by hand in the rice-field in bundles of four to six plants. This planting is expensive. To plant about 110 acres (150 bighas) is a day's work for 150 men. The planting of rice takes longer than the planting of *nachni* and *van* as in the case of these coarser and hardier grains it is enough to throw the plants on the ground. Rice fields, which are called khachars in Marathi, are formed by throwing earthen banks across the beds of watercourses or lines of drainage, by holding back the muddy deposit, and

controlling the supply of water which during the rainy months comes from the higher lands. The best rice soil is a bright yellow deepening to black as the quality declines. At the same time the yield of rice depends as much on the plentiful and constant supply of water as on the character of the soil. Once in two or three years, to prevent their silting, rice-fields are three or four times ploughed in opposite directions. The clods are broken with the *kulav* and the *petari* is then used to clear the loose soil out of the bottom of the field, and heap it on the bank. In June and early July while the seedlings are getting ready for planting, the flooded rice-field is ploughed and trodden by oxen into a mass of soft slushy mud. Fifteen days after planting, when the seedlings have begun to shoot, their dead leaves are plucked off by the hand. As the planting is usually done during pouring rain and in deep mud the head and back of the planter are always shaded by a water-tight shell made of wicker-work and teak leaves called virle or panghongadi, and a stool or tivas, whose seat and bottom are two parallel planks separated by a single leg of wood, is used to sit on. After the planting is over the water is kept standing in the field at a certain depth till the crop ripens when it is allowed to dry. Between September and November planted rice is reaped with the sickle or vila and carried as cut and laid on the bank lest the ripe grain should be injured by lying on the wet ground. In eight or nine days a man and his wife can cut about four acres (5 bighas) of rice. As the whole crop should be carried and stacked before the grain dries labourers have to be hired to carry the sheaves to the thrashing-floor. To separate the husk from the grain rice has to be pounded or ground. Except where it is grown rice is eaten by the poor on feast days only; it enters into the daily food of all the middle and upper classes, whether Hindus or Musalmans. It is most commonly simply boiled; it is also eaten parched as lahis and pohas and murmuras. [To make pohas the husked rice is soaked in cold water for three days, scalded, and left to drain dry in an open basket. It is then slightly parched and pounded in a stone mortar. The crushed pulp forms into flat lozenge-shaped pieces and the husk is separated by a winnowing fan. Pohas are sometimes ground to flour and used in sweetmeats. For murmuras the husked rice is partially dried in the sun after a three days' soaking and scalding. It is slightly parched and the husk separated by braying in a mortar. Salt water is next thrown over it and the grain is again parched in hot sand which makes it puff and swell. These are most useful as ready-cooked food for a journey and are generally given along with dale or parched gram pulse as rations to Hindu soldiers on a sea voyage. The flour is also used in various preparations; the straw or pendha is used as cattle fodder.

5. Gahu, Wheat, Triticum aestivum, in 1881-82 covered (60,524 acres 21,677 of them in Junnar, 9537 in Maval, 8688 in Bhimthadi, 8205 in Khed, 4919 in Sirur, 3503 in Haveli, 2983 in Indapur, and 1012 in Purandhar. Wheat is a late or cold-weather (October-March) crop. It is grown over the whole district but in small quantities in the west lands of Junnar, Khed, and Haveli. It requires a moister climate than *ivari* and in the eastern fringe of the west lands is generally grown as a drycrop. Elsewhere it is grown as a dry-crop only in favoured places, but over the whole eastern plain it is largely grown as watered crop. Wheat wants black or rich soil. The best soil is the alluvial loam known as *gavhali* or the wheat land. Wheat also thrives in the lowlying black or better brown clay soils in low lands where drainage gathers. Four kinds of wheat are grown, bakshi, kate, khaple also called jod, and pote that is big-bellied. [In 1842 Dr. Gibson is said to have introduced] about thirty-eight choice varieties of wheat. Bom. Gov. Rev. Rec, 1453 of 1843, 79.] Bakshi requires good black soil. It is sown in October or November, is usually watered and manured, and is reaped in February or March. This wheat is of the finest quality, but as it is delicate it is not largely grown. The stem is sometimes as much as five feet high, the grain is larger than the grain of other kinds of wheat, and the beard, when ripe, is tipped with black. Kate wheat is sown in good black soil in October, is usually watered but not manured, and is reaped in February. It is shorter-stalked and smaller-grained than either the bakshi or khaple, is hardier than the bakshi, and is the wheat commonly grown in dry lands. Khaple or job, husk wheat, is sown in black soil in November, is always both watered and manured, and is reaped in March. Khaple is the wheat usually grown in gardens. It is very hardy. It owes its name to the fact that the grain cannot be separated from the husk without pounding. It is sown as a second or dusota crop in January and February in irrigated lands after bajri, maize, tobacco, chillies, or wheat with good results. Pote or big-bellied wheat is less esteemed than other varieties. It is sown in poor black soils in November, is neither watered nor manured, and is reaped in February. Other varieties known in the district are daudkhani and kalekusal. Two and a half to three and a half pounds of wheat are sown to the acre, the better the soil the less the seed. The average acre yield from all kinds of wheat in unwatered land is 500 to 600 pounds and in watered land 1000 to 1100 pounds. In garden land wheat follows rice and in dry-crop land it comes best after bajri, maize, tobacco, or chillies. After two or three ploughings the wheat is sown and the land is levelled with the harrow. When the seed has begun to sprout, to regulate the watering, ridges and small water-courses are made with a large rake in the shape of squares or vaphas. Wheat after it has come into ear is affected by mildew called tambera and garva or khaira.

These diseases are said to be commoner in fields where mustard is grown than elsewhere. *Tambera* appears after unseasonable and heavy rain and covers the crop with small. swellings containing a reddish powder. It very seriously injures if it does not totally destroy the crop. *Garva* or *khaira* appears after cloudy and misty weather in circles at distances from each other. It covers the crop with small swellings containing a dark brown powder. The grain becomes small and shrivelled. *Garva*, is neither so common nor so destructive as *tambera*. Green wheat ears called *ombya* are parched and eaten. The ripe grain is used only as bread. It is seldom eaten by the poor except on feast days as it is never eaten without the addition of clarified butter or *tup*. The flour is used largely in pastry and sweetmeats. Wheat straw is eaten as fodder with or without a mixture of chaff.

- 6. Harik or Kodru, Paspalum frumentaceum, in 1881-82 covered 397 acres in Junnar. It is grown almost entirely in the western hill-sides and light soils. It is sown in June and reaped in October or November. The grain, which is round and flattish and of the size of a mustard seed, forms in double rows on one side of a flat stem, and until ripe the ear remains enveloped in a sheath. New harik is said to be powerfully narcotic and is eaten only by the poor who prepare it in various ways, and from use are able to eat it with impunity. [Mr. Sinclair, C. S., found that in Thana the grain was intoxicating when grown for the second or third time in the same land. Fletcher's Deccan Agriculture.] The straw is hurtful to cattle.
- 7. Jvari, Indian Millet, Sorghum vulgare, the most largely grown cereal in Poona, in 1881-82 covered 588,502 acres, 226,152 of which were in Haveli, 129,069 in Indapur, 73,026 in Purandhar, 53,239 in Sirur, 54,877 in Bhimthadi, 28,782 in Khed, 16,438 in Junnar, and 2918 in Maval It is grown over the whole district but in the hilly west of Junnar, Khed, Maval, and Haveli only in small quantities. It is the staple grain of the eastern plain. There are many varieties of Indian millet some of which belong to the early and others to the late harvest. The early varieties are found only in the belt which fringes the east of the western districts, and are sown thickly for fodder rather than grain. The late varieties are grown in the eastern plain, yield grain plentifully, and their fodder though less abundant is of better quality than that of the early varieties. There are three chief early varieties argadi, kalbhondi, and nilva. Argadi, also called utavli, is sown in June or July in shallow black or light soil, and, without the help of water or as a rule of manure, is grown and cut in November. The stalk is sometimes ten feet high; the head is small. This variety is also sown as a watered crop in April and matures in June or July. When

grown as a watered crop it is called *khondi* or *hundi*. [*Khondi* or *hundi* is described as a separate variety by Colonel Sykes. This crop is sometimes sown broadcast and thick and cut for fodder before the head appears. Kalbhondi, that is black husk, is sown in June or July without either water or manure, and is harvested in November. The stem is six or eight feet high and the head large. Nilva, that is bluehusk, a variety much grown in Khandesh, is sown in June in black soils without either water or manure and is cut in November. The stem is very tall and coarse and the head large. The fodder is prized for milch cattle. There are three late varieties of Indian millet shalu, dudhmogra, and tambdi. The best of the late kinds is shalu. It is sown in black soils from mid-August to mid-October and harvested from mid-January to mid-February. The stalk is three to five feet long and sweet-juiced, and the grain white. *Dudh-mogra* is sown with *shalu* either mixed in the same furrow or in separate furrows. The straight hard stalk is poor fodder and the scattered feather head has the merit of being too light to give birds a foothold. The full milky grain parches into excellent lahis. A dark-husked variety of dudh-mogra has a stem which is sometimes used as a weaver's hand-rod. Tambdi, that is red, Marshall's Sorghum devia, is sown generally in light soils in late July and early August, and, without either water or manure, ripens in early January to early February. The stem is three to four feet high and poor as fodder, and the grain is white and hard. Four to five pounds of late ivari are sown to the acre, the better the soil the less the seed. The early Indian millets take eight to ten pounds of seed an acre. Unwatered *jvari* in all kinds of soil gives an average yield of 400 to 500 pounds the acre, and watered *jvari* yields 1000 to 1200 pounds. Shalu is the most productive variety sometimes yielding as much as 2500 pounds the acre. Before the head forms the plant is called kadval and when perfect batuk. [Batuk is also applied to the plants of tur sown in a crop of bajri.] Jvari is the only cereal whose straw or kadba is used as fodder in its natural state. The straw of all other cereals and of all soft stemmed pulses is trodden to pieces, mixed with chaff, and stowed in large baskets, and is called bhuskat. Jvari stalks are stacked and thatched in the rainy west; in the drier east they are stowed in long grave-like ridges and covered with clods of black soil. The grain is chiefly used as a bread grain, but is also eaten parched as lahi. When in season the parched unripe *jvari* heads form a chief item of food with the labouring classes and are called kurda.

8. *Makka,* Indian Corn, Zea mays, in 1881-82 covered 3844 acres, 2435 of which were in Purandhar, 720 in Bhimthadi, 630 in Indapur, fifty in Haveli, and nine in Sirur. In 1842 the American maize was naturalised at the experimental garden at Hivra in Junnar. [Bombay]

- Gov. Rev. Rec. 1453 of 1843, 77.] It is sown in the eastern subdivisions in black soil. When unwatered it is sown in June and ripens in August; when watered it may be grown at any season. The heads or butas are usually eaten parched or boiled while green and the ripe grain is also parched and made into lahis, and after grinding is used as flour. The stalk is a very coarse fodder.
- 9. Nagli or Nachni, Eleusine corocana, in 1881-82 covered 52,365 acres, 16,310 of which were in Khed, 14,036 in Maval, 12,572 in Haveli, 6983 in Junnar, and 2464 in Purandhar. It is grown only in the hilly west sometimes in wet lands by planting like rice or by sowing with the drill, and often in high lands. In planting *nachni* the seedlings are simply thrown on the ground in little trenches at about equal distances apart and left to root as they can. Nachni does not want a deep or a rich soil, but in any but a moist soil it perishes. It is sown in June and ripens in October or November, As the Stalk is hard, reaping is difficult and costly. It takes four persons eight days to cut about three acres (2 bighas) of nachni. The carrying and stacking are also expensive. Nachni should be carried as soon as possible after the crop is cut, and the sheaves should be carried only in the morning when the heads are wet with dew. Later in the day the heat of the sun shrivels the husk and loosens the seed. Under the name of hurda the green heads are parched and eaten. The ripe grain is eaten in cakes by the west country poor and the flour is made into a cooling drink called ambil. The straw, powdered and mixed with chaff, is used as fodder.
- 10. Rala, Panicum italicum, in 1881-82 covered 1084 acres, 681 of which were in Purandhar, 136 in Bhimthadi, 113 in Haveli, eighty-one in Indapur, sixty-eight in Sirur, and one in Junnar. It is grown chiefly in the east of the district in shallow black or light, soils usually in the same fields as bajri. It is of two varieties, a red and a white, which differ only in colour. It is sown in June and ripens in October. The grain is separated from the husk by pounding and is usually boiled and eaten whole. The stalk is used for fodder and thatch.
- 11. Satu, or Jav, Barley, Hordenm hexastichon, in 1881-82 covered 141 acres fifty-one of which are in Bhimthadi, fifty in Haveli, twenty in Purandhar, fourteen in Indapur, and six in Junnar. It grows only in black soil, is sown in November, and, with the help of water and manure, is reaped in February. Barley is chiefly used in making the ready-cooked food called satuche-pith or barley flour. The grain is parched, ground, and mixed with a small proportion of gram and wheat-flour and flavoured with seeds. When eaten it is usually made into little dough balls with water. The grain is also used in the

shraddha or mind-rites for the dead and the flour in the shravani or Shravan purification.

12 and 13. Sava, Panicum miliaceum, and Vari', Panicum miliare, in 1881-82 covered 32,342 acres, 11,163 of which were in Khed, 8282 in Haveli, 7885 in Maval, 4317 in Junnar, and 689 in Purandhar. They are grown only in the west of the district usually in light red soils and on hill-sides. They are not watered or manured, but the seedlings are planted like rice-seedlings except that instead of fixing them in the ground they are simply thrown on the surface and left to root. When the plants are about a foot high sava requires weeding. This is done for each other by the villagers at no expense except some liquor for the weeders. In 1821, in these weeding parties a drummer was at hand who beat incessantly and at intervals stirred on the weeders calling out Bhalere Dada, Bhale Bhau Dada, Well done brothers, well done. The weeders got as much spirit as they could drink. [Captain H. Robertson in East India Papers, IV. 579. From the hardness of the stalks and the need of prompt and early-morning carrying, labour has to be hired in harvesting sava and vari as well as in harvesting nachni. Both sava and vari have to be unhusked by pounding. They are mostly eaten by the west country poor. They are boiled like rice and are sometimes ground to flour and made into bread. The straw is not used as fodder.

Pulses

Thirteen pulses are grown in Poona. The details are:

POONA PULSES.

| NO. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|-----------------|-------------|--------------------------|
| 14 | Dang Chavli | | Dolichos sinensis. |
| 15 | Harbhara | Gram | Cicer a rietinnm |
| 16 | Kulthi or Hulga | | Dolichos biflorua. |
| 17 | Lakh | | Lathyrus sativus. |
| 18 | Masur | Lentils | Ervum lena. |
| 19 | Math or Matki | Kidney Bean | Phaseolus aconitifolius. |
| 20 | Mug | Green Gram | Phaseolus mungo. |
| 21 | Pavta | | Dolichos lablab. |

| 22 | Ran or Shet Chavli . | | Dolich03 catjang. |
|----|----------------------|------------|---------------------|
| 23 | Tur | Pigeon Pea | Cajanus indicus. |
| 24 | Udid | Black Gram | Phaseolus radiatus. |
| 25 | Val | | Dolichos spicatus. |
| 26 | Vatana | Peas | Pisum sativum. |

- 14. Dang Chavli, Dolichos sinensis, like but larger than ran or shet chavli Dolichos catjang (No. 22), is usually grown in gardens round the edge of other crops. It is a strong climber, with a pod some five or six inches long, and a rather dark seed.
- 15. Harbhara, Gram, Cicer arietinum, the most largely grown pulse in Poona, in 1881-82 covered 28,879 acres, 6398 of which were in Bhimthadi, 5020 in Indapur, 4770 in Junnar, 4329 in Khed, 2678 in Maval, 2360 in Sirur, 1620 in Purandhar, and 1404 in Haveli. It is grown in the east of the district and very rarely in the west. It requires good black soil. It is sown in November and without either water or manure is harvested in February. The leaves are used as a vegetable. The grain is eaten green, is boiled as a vegetable, and is parched when it is called hola. When ripe it is split into dal and eaten boiled in a variety of ways and in making a sweet cake called *puran-poli*. It is slightly soaked, parched in hot sand, and called *phutanas*, which are sometimes flavoured with turmeric salt and chillies. It is also given to horses. The living plants yield a quantity of vinegar or oxalic acid called amb which gathers on the plants at night, and soaks cloths which are laid over them. The dry stalks are good fodder. A lightcoloured variety called kali is seldom grown in Poona.
- 16. *Kulthi,* Horse-gram, Dolichos biflorus, in 1881-82 covered 13,065 acres, 4056 of which were in Khed, 2934 in Bhimthadi, 2220 in Junnar, 2158 in Purandhar, 942 in Sirur, 645 in Indapur, and 110 in Haveli. It is grown throughout the district and is sown generally with *bajri* in separate rows in shallow light soil. It is sown in June and ripens in November without either water or manure. The pulse is boiled whole and is given to horses, it is also eaten in soap and porridge. The leaves and stalks are good fodder.
- 17. Lakh, Lathyrus sativus, is grown in small quantities in the west. It is sown in November or December in black soil or as a second crop after rice. It grows without water or manure. The peed is like a mottled gray pea. It is not oaten while green. The ripe pulse is boiled

whole and eaten, and when split is cooked in various ways. The stalk and leaves are eaten by cattle.

- 18. Masur, Lentils, Ervum lens, in 1881-82 covered 836 acres, 440 of which were in Maval, 302 in Khed, and ninety-four in Junnar. It is grown throughout the district. It is sown in November or December in black soil or as a second crop on rice lands, grows with-out water or manure, and is harvested in February and March. The green pods are sometimes eaten as a vegetable, and when ripe it yields the most delicate split pulse in the Deccan. The boiled pulse is also eaten whole.
- 19. Math or Matki, Phaseolus aconitifolius, grown chiefly in the eastern plain, is sown mixed with bajri in shallow black or light stony soils in June or July and is harvested in November. The pulse is split and eaten as dal in different ways. It is ground to flour and used with the flour of other grains in making cakes. It is also eaten parched or boiled whole with condiments. The grain is given to horses and cattle and the stalks are good fodder.
- 20. Mug, Green Gram, Phaseolus mungo, in 1881-82 covered 3900 acres, 2349 acres of which were in Khed, 687 in Junnar, 351 in Bhimthadi, 250 in Purandhar, 226 in Haveli, thirty-one in Indapur, five in Sirur, and twenty-one in Maval. It is grown chiefly in the east of the district. It is sown in June by itself in shallow, black, or light stony soils, and often as a first crop on rich lands in which a second called dusota or bivad crop is raised. It is neither watered nor manured, and is harvested in September. The green pods are eaten as a vegetable. The ripe green-coloured pulse is eaten boiled whole, or is split and used as dal. It is parched, ground to flour, mixed with butter and made into spice balls. It is also made into porridge. The leaves and stalks are good fodder. Mugi, a smaller blackish variety, is sown with bajri or argadi in June and reaped in November. It is inclined to creep and remains longer on the ground than mug.
- 21. Pavta, also called Sweet Val, Dolichos lablab, is sown some-times in June mixed with bajri and sometimes in November on the banks of rivers or in the west as a second crop after rice. Two varieties differ only in the colour of the grain, one is pale yellow the other black with a fine seam. It grows without water or manure, ripens in February-March, and goes on bearing for about two months. The boiled green seeds are eaten as a vegetable and the ripe pulse is split and eaten in many ways. The leaves and stalks are a fodder which is especially valued for milch cattle.

- 22. Ran or Shet Chavli, Dolichos catjang, is grown chiefly in the west lands. It is sown in June in shallow light soils and as the first of a double crop in rich soils. It grows without water or manure, and is harvested in September. The green pods which are about two inches long and the leaves are eaten as vegetables, and the pulse, which is pale yellow oval and dented on one side, is cooked in many ways, both split and whole.
- 23. Tur, Cajanus indicus, in 1881-82 covered 12,851 acres, 7830 acres of which were in Sirur, 1576 in Bhimthadi, 1399 in Khed, 769 in Junnar, 589 in Haveli, 356 in Indapur, 237 in Indapur, and ninety-five in Maval. It is grown chiefly in the eastern sub-divisions mostly in shallow and sometimes in deep black soils, in the same field with bajri, in the same or in separate furrows. It is sown in June-July, and, without water or manure, is harvested in January and February. During the eight months tur is on the ground, it is said to flower and seed eight times, all the pods remaining on the plant till harvest. It is a perennial plant, but is always pulled out after the first year. The green pods are eaten as a vegetable, and the ripe pulse is split and eaten boiled in a variety of ways. The yellow split-pulse or dal is in common use being made into porridge and mixed with vegetables, and is little less valuable than gram. The leaves and pod shells are excellent fodder, and the stem is in use for wattling house walls and roofs, and for making baskets and brooms. Tur or doll-bush that is dalbush charcoal has long been famous for making gunpowder.
- 24. *Udid*, Black Gram, Phaseolus radiatus, in 1881-82 covered 1519 acres, 1031 of which were in Khed, 330 in Junnar, ninety in Purandhar, forty-seven in Haveli, and twenty-one in Maval. It is grown almost entirely in the east of the district. It is sown in June frequently with *bajri* or *argadi* or in rich soils when a second crop is to follow. It is neither watered nor manured, and ripens in September. The green pods are rarely used as a vegetable. The black ripe pulse is split into *dal*, and is a most fattening food. It is parched and ground to make different sorts of spice balls and is the chief element in the thin wafer-biscuits called *papads*. The stalks and leaves are a good fodder. *Udadi* is a smaller and inferior variety which does not ripen till November.
- 25. *Val*, Dolichos spicatus, is chiefly grown in the east and centre of the district, often round or mixed with garden crops, especially in the sugarcane fields where it is sown both as fodder and for shade. When grown with or in rows round *bajri* or early *jvari* it is sown in July and without water or manure ripens in four months, and continues bearing for some time longer. The seeds are slightly bitter, smaller, and not so

flat as *pavta* seeds, which is sometimes known as sweet *val*. The green seeds are eaten boiled, the ripe pulse is used in many ways as *dal* or in soup, and the stalks and leaves are prized as fodder for milch cattle.

26. Vatana, the Pea, Pisum sativum, in 1881-82 covered 836 acres, 329 of which were in Junnar, 329 in Khed, 100 in Haveli, seventy-six in Maval, and two in Indapur. Peas are grown in moist places throughout the district. They are sown in October or November or later as a second crop after rice, and, without water or manure, are harvested in four and a half months after sowing. The seed is eaten green

as a vegetable and when ripe is boiled whole or split and eaten in various ways. The leaves and stalks are good fodder.

Seven oilseeds are grown in Poona. The details are:

POONA OILSEEDS.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|--------------------|-------------|-----------------------|
| 27 | Ambadi | Brown Hemp | Hibiscus cannabinus. |
| 28 | Bhuimug | Earth nut | Arachis hypogoea. |
| 20 | Erandi | Castor-seed | Ricinus communis. |
| 30 | Javas or Alshi | Linseed | Linum usitatissimum. |
| 31 | Karle or Khurasni | Nigerseed | Verbesina sativa. |
| 32 | Kusumba or kardai. | Safflower | Carthamus tinctorius. |
| 33 | Til | Sesamum | Sesamum indicum. |

27. Ambadi, Brown Hemp, Hibiscus cannabinus, in 1881-82 covered 1375 acres, 659 of which were in Bhimthadi, 526 in Sirur, ninety-four in Indapur, eighty-nine in Purandhar, and seven in Maval. It is grown in small quantities in shallow black soils chiefly in Bhimthadi, Sirur, and Indapur. It is sown in June usually mixed with bajri, grows without water or manure, and is harvested in December or January. The young sour leaves are eaten as a vegetable. The seed is sometimes given to cattle and in times of scarcity is mixed in bread. It is chiefly used as oil-seed and, before the oil is extracted, is always mixed with karle or linseed. The bark yields a valuable fibre which is separated from the

stalk by soaking. It is made into ropes for various field purposes either by the husbandmen or village Mangs.

- 28. Bhuimug, Earthnut, Arachis hypogoea, is grown both in the eastern plains and in the eastern fringe of the west lands. It is planted in June, and in the east with the help of water and manure and in the western plain with the help of manure, ripens in December, but is often dug in November and eaten raw or parched. The ripe fresh nut is sometimes boiled with condiments, and eaten as a vegetable, but is more frequently used as an oilseed. An edible oil is pressed from the nuts which are usually first mixed with kardai or rala seeds as the pure earthnut oil is said not to keep. It is a favourite food with wild pig, and along the Mutha canals has suffered so severely from their ravages, that the people have given up growing it.
- 29. *Erandi*, Castor-seed, Ricinus communis, is grown in small quantities chiefly in the black soils of the eastern plain, sometimes round other crops and more often in patches by itself. It is sown either in June or November, and without water or manure is harvested in November or February. Its stem and flowers are red. The oil, which is used more for burning than as a medicine, is drawn by boiling the bruised bean and skimming the oil that rises to the surface. The proportion of oil to seed is as one to four. The leaf is applied as a guineaworm poultice and the dried root as a febrifuge. A large variety of the castor-plant, probably R. viridis, is grown in gardens round other crops. Its stem and flower are green. Both varieties are perennial and would grow to a considerable size if they were not taken out of the ground at the end of the first year.
- 30. Javas or Alshi, Linseed, Linum usitatissimum, in 1881 covered only 152 acres, seventy-seven of them in Indapur, seventy in Bhimthadi, nine in Purandhar, and three in Sirur. It is grown in small quantities solely in rich black soils in the east either in gram or wheat fields in separate furrows or less seldom as a separate crop. It is sown in November and without water or manure is harvested in February. It does not grow more than two feet high. The seed is used in making relishes or *chatnis* and the oil which is produced from the seed in the proportion of four to one is used in cookery. No use is made of the fibre.
- 31. *Karle* or *Khurasni*, Nigerseed, Verbesina sativa, erroneously called *kale til*, is grown in considerable quantities in shallow black and light soils chiefly in the west fringe of the plains and in the western hills. It is sown in June and without water or manure is harvested in

November. The seed is eaten in relishes or chatnis, but it is chiefly known for its oil which is produced from it in the proportion of live to six, and is universally used by the lower classes in cooking. The oil-cake is much prized for milch cattle.

- 32. Kardai or Kusumba, Safflower, Carthamus tinctorius, is grown chiefly in the east lands with late *jvari* or wheat either mixed or in separate furrows. It is sown in October or November, and, without water or manure, is harvested in February or March. The young leaves are eaten boiled as a vegetable and the oil which is produced from the seed is much esteemed in cooking. Kardai and kusumba kardai are grown indiscriminately. Kardai C. tinctorius has much deep red in the flower and elsewhere is used as a dye. kusumba kardai, probably C. persicus, has a yellow flower and is more prickly than c. tinctorius.
- 33. *Til,* Sesamum indicum, of two kinds, *gora* or *harra* white *til* and *kala* black *til*, covered in 1881-82 29,411) acres, 12,381 of which were in Khed, 5806 in Junnar, 5403 in Maval, and 4302 in Haveli. It is grown throughout the district, but in considerable quantities only in Khed, Junnar, Maval, and Haveli. It is sown in June' usually with *bajri* either mixed in the same line or in separate lines, and is cut in November. It springs unsown in fallow lands. The seed is used in *shraddha* or mind-rites for the dead, forms part of many sweetmeats, and yields abundant oil which is used both in cooking and as a medicine. The oil-cake or *pendh* is given to cattle, and in times of scarcity is eaten by the poor with salt.

Fibres.

Three fibre plants are growr in Poona. The details are:

POONA FIBRE PLANTS.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|--------------|-------------|----------------------|
| 34 | Ambadi | Brown Hemp | Hibiscus cannabinus. |
| 35 | Kapus | Cotton | Gossypium herbaceum. |
| 36 | San and Tag. | Bombay Hemp | Crotalaria juncea. |

34. Ambadi. See No. 27.

35. Kapus, Cotton, Gossypium herbaceum, in 1881-82 covered 4565 acres in Indapur. It is grown in black soil chiefly in the east, to a small extent in the western plain, and not at all in the hilly west. Several varieties are grown, most of which have been lately introduced. It is sown in July, is grown without water or manure, and bears in October or November. The crop, which is the woolly covering of the seed, is gathered from the growing plants in three or four pickings as the pods burst before November, when the plant ceases to bear. The seed is called *sarki* and is much prized as food for milch cattle. The stems are used in cheap basket-work and when the picking is over cattle are grazed on the leaves and shoots.

In 1821, the average price of cotton was about £8 10s. (Rs. 85) a *khandi* of 500 pounds or about 4*d.* ($2^{2/3}$ as.) the pound. The Collector, Captain Robertson, was told that thirty or forty years before, in the time of Peshwa Madhavrav (1761-1772) a large quantity of seed had been brought from the Berars, but proved a failure. [East India Papers, IV. 590. In 1830-31, Dr. Lush was successful in growing cotton in the botanical garden at Dapuri, about six miles west of Poona. [Chapman's Commerce, 51. See also Transactions of the Agri-Horticultural Society of Bombay, July 1843. In 1841, the only parts of the district where cotton was grown in any quantity were in Bhimthadi and Indapur, where the soil was better suited to its growth than in any other part of the district. In that year one landholder in the Bhimthadi village of Bolvadi grew cotton, which in the Bombay market fetched a price equal to the best Broach. [Bom. Rev. Rec. 1344 of 1842, 71-72.] Dr. Gibson, the superintendent of the botanical garden at Hivra, considered the cultivation of cotton unsuited to Poona. [Bom. Rev. Rec. 1453 of 1843, 176-7.] In 1842-43 the area under cotton was increased by not less than 2132 acres, chiefly in Junnar and Indapur where the people were anxious to grow cotton. The plants throve for a time, but most of them failed from want of rain. [Bom. Rev. Rec. 1568] of 1844, 88. In 1844, Indapur was the only part of Poona where cotton was grown; there cotton was found in small quantities in every village mixed with bairi and other crops. The area under cotton was 4816 acres against 4636 in the previous year. The outturn was twenty tons (60 khandis) of which about sixteen tons (48 khandis) were sold in Poona and Satara for £507 2s. or at the rate of £5 (Rs. 50) for a Surat *khandi* of 746 pounds, that is about $1\frac{1}{2}d$. (1 a.) a pound. [Bom. Rev, Rec. 17 of 1844, 75.] In the next two years the area under cotton declined. In 1847, Indapur was again the only cotton-growing part of the district. The quantity produced was about thirty tons (90 khandis) and the area under cultivation was 3359 acres against 11/4 khandi and 190 acres in the previous year. [Bom. Rev. Rec. 23 of 1849.] From

1841 to 1861 Government frequently tried to increase the growth of cotton, but without success. Both as regards soil and climate Poona was considered unsuited for foreign cotton and there seemed to be little prospect of any great increase of the cultivation of the local variety. The small quantity grown was almost entirely devoted to home use. The following statement shows the total area under cultivation, the area under cotton, and the area capable of producing cotton during the twenty years ending 1860-61: [Cassel's Cotton in the Bombay Presidency, 87; Dr. F. Boyle's Culture of Cotton in India, 387.]

POONA COTTON, 1841-1861.

| YEAR. | Tillage Area. | Cotton Area. | Area fit for Cotton. | YEAR. | Tillage Area. | Cotton Area. | Area fit for Cotton. |
|-------------|------------------|-----------------|----------------------------|-------------|------------------|-----------------|----------------------------|
| | Acres. | Acres. | | Acres. | Acres. | | |
| 1841- 42 | 982,600 | 2684 | | 1851- 52 | 1,273,394 | 7015 | |
| 1842- 43 | 1,009,728 | 1846 | | 1852- 53 | 1,316,767 | 5967 | |
| 1843- 44 | 1,055,282 | 4636 | | 1853- 54 | 1,368,430 | 6712 | |
| 1844- 45 | 1,063,127 | 3808 | | 1854 55 | 1,395,080 | 4122 | |
| 1845- 46 | 1,102,088 | 190 | Estimated at 100,000 | 1855- 56 | 1,447,006 | 602 | Estimated at 100,000 |
| 1846- 47 | 1,148,755 | 3359 | acres. | 1856- 57 | 1,534,473 | 2534 | acres. |
| 1847- 48 | 1,228,304 | 3797 | | 1857- 58 | 1,566,231 | 2904 | |
| 1848- 49 | 1,227,898 | 1693 | | 1858- 59 | 1,598,885 | 8857 | |
| 1849- 50 | 1,196,719 | 4646 | | 1859- 60 | 1,654,399 | 6934 | |
| 1850- 51 | 1,215,015 | 4682 | | 1860- 61 | 1,664,801 | 8730 | |

In 1862 the area under cotton rose to 30,049 acres in Indapur and large profits were made by the cultivators. In 1870-71 it stood at 17,072 acres. Since then, except in 1872-73, 1874-75, and 1882-83, when it stood at 10,170, 21,127, and 22,375 acres respectively, it has fluctuated between 100 acres in 1871-72 and 4565 acres in 1881-82.

36. *Tag* or *San*, Crotalaria juncea, grows in small quantities chiefly in the black eastern plain. It is sown in July, is grown without water or manure, and ripens in October. It is left standing for about a month after it is ripe that the leaves which are excellent manure may fall on the land. In gardens and occasionally in dry-crop lands it is grown solely for manure, the plants being ploughed into the soil when ready to flower. After it is soaked the bark yields a fibre which is considered the best material for ropes, coarse canvas, twine, and fishing nets. Almost the whole supply is used locally.

Dyes.

Four dyes are grown in Poona. The details are:

POONA DYES AND PIGMENTS.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|-------------------|---------------|-----------------------|
| 37 | Halad | Turmeric | Curcuma longa. |
| 38 | Kusumba or Kardai | Safflower | Carthamus tinctorius. |
| 39 | Shendri | | Bixa orellana. |
| 40 | Surunji or A'l | Indian Madder | Morinda citrifolia. |

37. Halad, Turmeric, Curcuma longa is grown in good black soil chiefly in the central and western plain. It is planted generally in June or July from layers and with manure and a watering every eight or ten days matures in December or January. It is grown only by the class of men who are known as turmeric-gardeners or Haldya Malis. The root or halkund is boiled before it is sent to market. When steeped in a preparation of lime-juice, tincal and carbonate of soda or papadkhar it is called rava. This yields a brilliant crimson dye which is used in painting the Hindu brow-mark. Men paint, putting the dye on wet, rubbing the root with water on a stone and applying the crimson with the finger; women powder, rubbing a small circle of wax on the brow and pressing redpowder on the wax. The redpowder is called kunku, or pinjar. The root is in universal use as a condiment, being the staple of

curry powder. *Ambe halad,* probably Curcuma ledoaria, a variety of C. longa and grown in the same way, is used only as a drug.

- 38. Kusumba. See No. 32.
- 39. Shendri, Bixa orellana. is a shrub grown rarely and in small quantities in garden lands. The powder surrounding the ripe seeds yields a deep red orange dye which is the ornotto of commerce.
- 40. Surungi or Al, Indian Madder, Morinda citrifolia, is seldom seen in the west, but is largely grown in deep soils in the east. It is sown in June, often in fields overgrown with grass and weeds, and without water or manure grows for two years. In the third year the roots are dug from a depth of three feet. The roots yield a red dye.

Narcotics.

Three narcotics are found in Poona. The details are:

POONA NARCOTICS.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|----------------|------------|------------------------|
| 41 | Ganja | Hemp | Canabis sativa. |
| 42 | Nagvel or Pan. | Betel-leaf | Piper or Chavica betel |
| 43 | Tambakhu | Tobacco | Niootiana tobacum. |

- 41. Ganja Hemp Canabis sativa is grown to a small extent in the best black soil in the eastern sub-divisions. It is sown in June or July, is grown with water and occasionally with manure, and is ready for cutting in December. When about two feet high the stem is twisted half round, a few inches above the root. This checks the upward growth and causes the plant to throw out side shoots. The fruit-yielding part is bruised just before the seed begins to ripen. When cut in December the plants are at once stacked and loaded with weights. The leaves fall when dry and the pods are used and known as ganja. The infusion made from the pods is called bhang. The pods or ganja are also smoked with or without tobacco, and several intoxicating drinks and a sweetmeat called majum are made. The fibre of this hemp is never used.
- 42. Nagvel or Pan Betel-leaf Piper betel is an important garden crop, especially in the Haveli villages of Kondvi Budruk, Kondvi Khurd, Undri,

Muhammadvadi, and Phursangi. It is grown in light red soil and requires much manure and constant watering. It generally lasts fifteen or if well cared for twenty years. It is grown in a betel-vine garden or pan mala which generally covers about an acre of ground. The vines are trained up slender hadga, pangara, shevri, and bakan trees planted in rows one to four feet apart and having leaves only at the top. The vines are grown by layers. They want water every fifth or sixth day. The whole garden has to be sheltered from wind and sun by high hedges or screens of grass or mats. Vines begin to bear in the third year, are at their best from the fourth to the thirteenth year, and, under favourable circumstances, go on yielding till the twentieth year. Every year in March, April, and May, the upper half of the vine is cut and the lower half is coiled away and buried above the root under fresh red earth and manure. Portions of the garden are thus treated in rotation, so that those first cut are ready to bear before the last are cut. A betel-leaf garden wants a considerable capital to start, and in weeding, watering, insect-killing, and leaf-picking, wants constant labour and attention throughout the year. Still it is a favourite crop. The returns from the sale of the leaves come in monthly, and the profits are greater than from any other garden crop. The betel-vine is almost always grown from well water. The people say channel-water does not suit the vine. Mr. Fletcher thinks the probable reason is that from the division of ownership it is difficult to secure a constant supply of channel water. Malis and some well-to-do castes including Brahmans rear the betel-vine, some with their own hands and some with hired labour. Tirgul Brahmans, who cultivate the betel-leaf as a specialty, are considered inferior to other Brahmans as they kill the flies that live on the vine. The betel-leaf is chewed by all classes with betelnut, quicklime, catechu, and some-times with tobacco and several spices. Several varieties are distnaguished.

43. *Tambakhu* Tobacco Nicotiana tabacum in 1881-82 covered 817 acres, 275 of which are in Junnar, 239 in Khed, 181 in Bhimthadi, eighty-four in Sirur, and thirty-eight in Indapur. It is grown to a considerable extent in rich soils in the western fringe of the plain country and to a small extent further east. The village of Ghode in Khed has more than 200 acres under tobacco. Low and alluvial land is generally preferred. It is sown in seed-beds in August and planted in September. It is seldom watered but is generally manured. The plant is not allowed to flower. All buds and branch shoots are nipped off as they appear, and only eight or ten leaves are allowed to remain. Because the buds of the plant have to be destroyed, Kunbis seldom grow tobacco themselves, but allow it, to be grown in their lands by Mhars, Mangs, and other low castes, who give the landholder half the

produce. The plants are cut in January or February about four inches from the ground, spread in the sun till they are thoroughly dry, sprinkled with water mixed with surad grass or with cow's urine, and while damp closely packed in a pit or stacked under weights and covered for eight days during which fermentation sets in. When taken from the pit or stack the leaves are made into bundles and are ready for sale. Though the stumps left in the ground shoot again the leaves are almost valueless, and are used only by the poor. The quality is poor. The average acre-yield of tobacco is about 300 pounds (2.375) mans). The wholesale price of cured tobacco is about 2d. a pound (Rs. 7 the man) and the retail price about 3d. a pound (Rs. 10 a man). Tobacco is smoked and chewed by all classes and is made into snuff. In 182.1, according to the Collector Captain Robertson, tobacco did not thrive. It does not appear in his list of crops. [East India Papers, IV. 50.1 Its cultivation was introduced before 1841. In 1841 Government forwarded to the Collector a box of Syrian tobacco seed to ascertain how it suited the soil and climate of Poona. The seed was distributed and sown in different parts of the district. Some sowings succeeded and others failed. At the Hafiz Bag, about two miles east of Junnar, Mr. Dickinson sowed it in good soil, and planted it in the usual way. When the plants were young, Mr. Dickinson thought they did not promise so well as the local plant He thought they might thrive better in the richest alluvial soil. [Bom. Rev. Rec. 1453 of 1843, 75-76.]

Eight spices are grown in Poona. The details are:

POONA SPICES AND CONDIMENTS.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|-----------|--------------|---|
| 44 | A'le | Ginger | Zinjiber officinale. |
| 45 | Badishep | Sweet Fennel | Anethum foenicatum. |
| 46 | Halad | Turmeric | Curcuma longa. |
| 47 | Kothimbir | Coriander | Coriandrum sativum. |
| 48 | Mirchi | Chillies | Capsicum annuum. |
| 49 | Ova | | Ptycotis a jowan or Lingusticum agivaen. |
| 50 | Shepu | Fennel | Anethum sowa or graveolus. |
| 51 | Us | Sugarcane | Saccharum officinarum. |

Spices.

- 44. Ale Ginger Zinjiber officinale is grown in good black soil. It is raised from layers at any time of the year, and, with manure and water every ten or twelve days, is ready for use green in five and mature in six months. The dry root called *sunth* is eaten as a condiment and is a favoarite cure for colds.
- 45. Badishep Sweet Fennel Anethum foenicatum is sown in gardens at any time and on the edges of dry crops in July and August. It matures in two months. The seed is eaten in curry and used as a condiment and an infusion of it is taken as a cooling drink.
- 46. *Halad* Turmeric Curcuma longa is in universal use as a condiment and forms the staple of curry powder. Details have been given under No. 37.
- 47. Kothimbir Coriander Coriandrum sativum is grown in small quantities in good black soil with or without water and manure in the east and centre of the district Among garden crops it is sown in any month and with bajri or other dry crops in July and August. The leaves are ready for use in three weeks and the seed or dhane in two months. The leaves and young shoots are much used as a garnish in curry and relishes and sometimes as a vegetable. The ripe seed is one of the most popular condiments.
- 48. Mirchi Chillies Capsicum annuum in 1881-82 covered 8089 acres, 3708 acres of them in Khed, 1867 in Junnar, 1131 in Sirur, 724 in Bhimthadi, 264 in Indapur, 221 in Haveli, 140 in Purandhar, and thirty-four in Maval. It is grown in the western fringe of the plain country. It is sown in May in a manured seed plot and is planted after fifteen days or a month. It begins to bear at the end of two months more, and, if occasionally watered, goes on bearing five or six months. The plant lasts two years but is almost always pulled up after about ten months. The first yield is much the finest and is usually sent to market, the rest being kept for home use. Chillies are eaten both green and ripe by all classes and are as much a necessary of life to the people as salt. According to Colonel Sykes the leaves are eaten as a pot-herb. The two commonest varieties are putomi a long chilly and motvi about two inches long Capsicum frutescens. Other occasional varieties are lavangi, C. minimum, C. grossum, C. ceraciforme, and C. purpureum.

- 49. Ova Ptycotis ajowan or Lingusticum agivaen is sown in gardens at any time of the year and with dry crops in July and August. It matures in three months. The seed is used as a stomachic.
- 50. Shepu Fennel Anethum sowa or graveolus is sown in gardens in any month and with bajri and other dry crops in July and August. It is fit for use as a vegetable in six weeks and the seed ripens in two and a half months. The plant is eaten as a pot-herb and the seed is used as a stomachic. See No. 45.
- 51. Us Sugarcane Saccharum officinarum in 1881-82 covered 5502 acres, 2260 of which were in Haveli, 1022 in Purandhar, 968 in Junnar, 428 in Khed, 378 in Sirur, 311 in Bhimthadi, 113 in Indapur, and twenty-two in Maval. With the help of water and manure sugarcane is grown in deep black soils all over the district except in the extreme west; in the east it is one of the chief garden products. It is also much grown in Junnar, Khed, and Haveli, where, since the opening of the Mutha canals the area under sugarcane has considerably increased.

Condiments.

In preparing land for sugarcane the plough is driven across it seven or eight times; village manure is thrown on at the rate of about six tons (20 large carts) to the acre; and the land is once more ploughed and flooded. When the surface is beginning to dry it is levelled with the beam-harrow and in December or March the sugarcane is planted. The layers, which are pieces of mature cane about six inches long, are set in deep furrows drawn by the plough. Sugarcane thus planted is called nangria us or plough-cane to distinguish it from pavlya us or trodden cane which is pressed on by the foot after the land has been ploughed, broken fine, and flooded. The treading system is usually followed with the poorer canes or in poor soil. Trodden cane or pavlya us is manured ten or twelve days after the layers are put down by folding sheep on the spot. Trodden cane sprouts a month after planting; plough-cane being deeper set takes a month and a half to show but suffers less from any chance stoppage of water and reaches greater perfection. Sugarcane is either eaten raw or is made into raw sugar or gul.

The raw sugar or *gul* is extracted on the spot generally by the husbandmen themselves. A wooden press or *gurhal* worked by two or more pairs of bullocks is set up. The appliances used in making *gul* are: *chulvan* a large fire-place; *pavde*, a wooden instrument like a hoe for skimming or for drawing the juice from the boiler into its receptacle; *shibi*, a stick with a bamboo bowl or basket for straining

the liquid; kahil or kadhai, a boiling pan for thickening the juice; and gurhal or charak the sugarcane-press. The press is made entirely of wood and is worked by two pairs of oxen. Two upright solid cylinders, eighteen or twenty inches across called navra-navri or husband and wife, whose upper parts work into each other with oblique cogs, are made to revolve by means of a horizontal beam fixed to the *navra* in the centre and yoked to the oxen at its ends. The cane, stripped of its leaves and cut into lengths of two or three feet, is thrice passed by hand between the cylinders, and the juice is caught in a vessel below, which from time to time is emptied into the kahil a shallow circular iron boiling pan. When the pan is fall the fire beneath it is lighted and fed chiefly with the pressed canes. After eight to twelve hours' boiling and skimming, the juice is partially cooled in earthen pots and finally poured into round holes dug in the earth and lined with cloth, where, when it forms into lumps called *dheps* or *dhekuls* it is fit for market. The pressing is done in the open air or in a light temporary shed and goes on night and day till the whole crop is pressed. A sugarcane press costs about £2 10s. (Rs. 25) and lasts three or four years. The boiling pan either belongs to the owner if he is well-to-do, or is hired either at a daily or a monthly rate according to the time for which it is wanted. The daily hire of a pan varies from 2s. to 4s. (Rs. 1-2) and the monthly hire from 10s. to £1 (Rs. 5-10). Each cane-mill employs about twelve workers. Seven remove the canes from the field and strip their leaves; one cuts the canes into pieces two feet long; two are at the mill, one feeding the mill the other drawing out the pressed canes; one minds the fire and another the boiling pan. The last is the *gulvia* or sugar-man. He is supposed to know exactly when the juice is sufficiently boiled and thickened to form lumps. As most sugarcanegrowers are without this knowledge a sugar-man is hired at 6d, (4 as.) a day or £1 (Rs. 10) a month. The two feet long pieces of cane are passed between the upright cylinders two or three at a time. To stop any leaks the pan is smeared with *lodan* a glazed preparation of *udid* or nachni flour. It is then put on the fire-place and the hollow between the pan and the fire-place is closed with mud. About 600 pints (300 shers) of juice are poured into the pan and the fire is lighted. The boiling lasts six or seven hours during which the juice is constantly skimmed and lime-water and *nachni* flour are thrown into the juice to keep it from being too much boiled. When the sugar-man thinks the proper time has come the pan is taken off the fire and the juice, with constant stirring, is allowed to cool for about an hour. When cool it is poured into cloth-lined holes in the ground two feet deep and a foot and a half across. It is left in the holes for a couple of days until it has hardened into lumps or nodules weighing fifty to sixty pounds (25-30 shers). When the lumps are formed they are taken away. If the

sugarcane is of eighteen months' growth it yields *gul* equal to one-fourth of the juice boiled; in other cases it yields about a sixth. If the juice is allowed to overboil, it cannot make the *gul*; it remains the boiled juice of sugarcane which is called *kakavi*. The people believe that sugarcane fed with well water yields one-fifth more *gul* than the same cane fed by channel water. The correctness of this belief is doubtful.

As far back as 1839-40 the growth of Mauritius cane spread greatly in Junnar. The land was well suited to this cane, the supply of water was abundant, and the people were anxious to grow it. Mr. Dickinson, a planter of considerable experience in the West Indies, was employed in making sugar. But the produce did not find a ready market. [Bom. Rev. Rec. 1241 of 1841, 69. He turned his refuse sugar and treacle to account by manufacturing rum. [Bom. Rev. Rec. 23 of 1849, 149.] In 1841, besides fifty-seven acres planted by the people on their own account, about 100 acres were planted in Junnar under contract with Mr. Dickinson, the manager of the sugar factory at Hivra. The sugar was used only by the European inhabitants of Poona and Ahmadnagar. [Bom, Rev. Rec. 1344 of 1842, 65-72.] In 1842-43, the area under Mauritius sugar rose from 157 to 388 acres. The cultivation spread from Junnar to Khed and Pabal. Sugar-works were started at Hivra by a joint stock company, and were afterwards bought by Mr. Dickinson. In Bhimthadi a Musalman planted some cane in the Chakar Baq with the view of making sugar and some husbandmen turned out sugar equal in grain to Mr. Dickinson's but not free from feculence. They also made *gul* which was sold at a higher price than that produced from the local cane. At first Mr. Dickinson was in the habit of contracting with the husbandmen to plant cane for him. He was afterwards able to obtain a sufficient supply at all times, chiefly from the gardens of Brahmans, headmen, and well-to-do husbandmen. In 1842 Mr. Dickinson made 87,000 pounds of sugar worth £1500 (Rs. 15,000) more than the outturn of the previous year. Messrs. Sundt and Webbe also planted about three acres of land with Mauritius cane in their garden at Mundhve, about five miles north-east of Poona, and made about 2½ tons (2826 shers) of gul, which was sold at 16s. (Rs. 8) the. palla of 120 shers. [Bom. Rev. Rec. 1568 of 1844, 83-84.] In 1844, the area under Mauritius cane rose from 388 to 547 acres. Mr. Dickinson's farming continued successful partly because he was able to dispose of his rum and sugar by Government contracts. Many husbandmen were willing to make sugar but from want of capital and of local demand were obliged to content themselves by producing aul. [Bom. Rev. Rec. 17 of 1846 73.]

In 1847 Mr. Dickinson's sugar had a good year at Hivra. He made about five tons (330 mans) of Muscavado sugar and sold it to the families of the soldiers and other Europeans at Poona and Ahmadnagar. Among the natives the demand was trifling and this discouraged its more extended manufacture. The natives even in the immediate neighbourhood, preferred the soft blanched sugars sold by the shopkeepers; their objection to Mr. Dikinson's sugar was its colour, but to refine it would have caused a serious loss in quantity. In 1847 a committee which met in Poona to distribute prizes for the best specimens of superior field products, awarded a prize of £30 (Rs. 300) to two persons. One of the prize specimens was some grained Muscavado sugar, the other was sugar made by evaporation. Before crystallization had set in this sugar had been poured into pots with holes in the bottoms through which the treacle was allowed to pass. A prize of £20 (Rs. 200) was awarded to two other natives for the best brown sugar; and a third prize of £10 (Rs. 100) to two others for the best specimens of *rasi* or inferior, sugar. All the prize specimens came from near Junnar, and were due to the exertions and influence of Dr. Gibson. [Rev. Rec. 23 of 1849, 154-156.]

In 1881-82, in connection with sugarcane experiments, Mr. Woodrow; the superintendent of the botanical garden at Ganesh Khind, noticed that the soil of Poona had very little of the silica in combination with potash of soda and lime in the form known as soluble silicates. It was not difficult to reproduce these soluble silicates without which sugarcane cannot grow; but it would be expensive in India and could not be done in a short time.

To grow sugarcane without wearing out the land it was necessary to manure with two tons an acre of quicklime and ten loads an acre of woodash, and to sow and plough in a green crop such as hemp or black mustard.

After a crop of sugarcane the land should be manured for four years as usual and such crops grown as the soil and the markets suit, preference as far as possible being given to pulses and cereals being avoided. In no case should more than one corn crop be grown. At the end of the four years if the ground is treated in the usual manner for sugarcane an average crop may be expected. Poona sugarcane soil is usually rich in lime, in some cases lime is present in excess. It would often pay to make a kiln and burn the calcareous earth on or near the field where lime was wanted.

Bulb Vegetables.

Twelve bulb vegetables are grown in Poona. The details are:

POONA BULB VEGETABLES.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|-------------------|--------------------------|-----------------------------|
| 52 | Alu | Great-leaved Caladium | Caladium grandifolium. |
| 53 | Batata | Potato | Solanum tuberosum. |
| 54 | Gajar | Carrot | Daucus carrota. |
| 55 | Kanda | Onions | Allium cepa. |
| 56 | Kangar | | Dioscorea fasciculate. |
| 57 | Karanda | Bulb-bearing Yam | " bulbifera. |
| 58 | Kon or goradu. | Common Yam | " alata. |
| 59 | Lasun | Garlic | Allium sativum. |
| 60 | Mula | Radish | Raphanus sativum. |
| 61 | Rajalu | Arrow-leaved Caladium. | Caladium sagitifollium. |
| 62 | Ratalu | Sweet Potatoe | Convolvulus batatas. |
| 63 | Suran | | Amophophallus campanulatus. |

52. Alu Calladium grandifolium or Arum campanulatum with the help of manure and abundant water is grown in marshy hollows chiefly in the hilly west. It is generally planted in early June. The leaf is ready to cut in three months and the plant continues bearing for years. The leaf and stalk are eaten commonly as a vegetable, the root or bulb more seldom and on fast days. Dr. Birdwood gives three species C. grandifolium, C. ovatum, and C. sagitifolium. [Graham mentions C. ovatum and C. grandifolium; and held that C. sagitifolium was probably the same as C. ovatum.] He says that the stem leaf and root of the first and third are edible, but only the leaf of the second. Rajalu, C. sagitifolium, has narrow pointed leaves and green instead of purplish stem and veins.

- 53. Batata the Potato Solanum tuberosum is grown in Khed and Junnar. These are generally known as Talegaon potatoes because they take rail at Talegaon station. Except close to the hilly west potatoes are generally watered and manured. The potato is cut into small pieces each with a bud or eye, is planted in June or July, and is ready between late September and November. The introduction of the potato into Poona is chiefly due to the exertions of the late Dr. Gibson who in 1838 brought potatoes from the Nilgiris and distributed them for seed. About 1841 potatoes and sugarcane were the chief products in the experimental garden at Hivra. Potatoes were already grown in Junnar, Khed, and Pabal in sufficient quantities to be exported to Dhulia, Aurangabad, and Bombay. [Bom. Rev. Rec. 1453 of 1843, 176-7.] They were sold at the rate of twenty pounds (10 shers) of the first sort, and thirty to forty pounds (15-20 shers) of the inferior quality to the rupee. The potatoes were large and equal to any then grown in any part of India. [Bom. Rev. Rec. 1344 of 1842, 72.] In 1844 the potatoes of north Poona supplied a very large portion of the Bombay market. [Bom. Rev. Rec. 17 of 1846, 72.] In 1845 Dr. Gibson obtained a supply of good Irish potatoes. Since 1845 potato-growing has spread rapidly and there is at present a considerable area of garden as well as dry-crop land under potatoes. The potato is not grown to the east of a line drawn from Shikarpur to Vadgaon Pir. Though it was at first viewed with suspicion the potato is now a favourite food with Brahmans, and the Kunbis also eat the smaller and less saleable roots. Of two varieties one with a smooth light brown peel is the best, being mealy when cooked and fetching a higher price. The other has a rough dark skin and both in size and quality is inferior to the smooth-skinned variety. Two potato crops are raised in the year. One is planted in dry-crop lands in July and dug in late September; the other is planted in December and dug in February. The second crop requires a weekly watering.
- 54. *Gajar* Carrot Dancus carrota with the help of water and manure is grown in large quantities in good black soil in the east of the district. The carrot is sown in garden lands at any time of the year and in drycrop lands in July or August. It is ready for use in three months. The root is eaten as a vegetable both raw and boiled. It is also slit and dried in the sun when it will keep five or six months. When sun-dried it is called *usris* and has to be boiled before it is eaten.
- 55. Kanda Onion Allium cepa of two varieties, a red and a milder and more popular white, with the help of water and manures is grown in good black soil. Onions are sown in seed-beds at any time during the rains or cold weather, and planted when about a, month old. It is fit

for use in two months after planting and takes two months more to come to maturity. It requires good black soil and should have water every eight or twelve days. The onion is eaten by all except by a few of the very orthodox and on certain sacred days. It is almost a necessary of life to the lower classes. The leaves are eaten as a potherb.

- 56. Kangar Dioscorea fasciculata is a yam closely resembling the konor common yam and the karanda or bulb-bearing yam. It is found in the hilly west. Its bulbs which form only below ground are like a small sweet potato in size and shape. The flesh is white and sweet.
- 57. *Karanda* is the bulb-bearing yam probably Dioscorea bulbifera. It is much like the common yam or *kon* in appearance and habits, and like it found in the hilly west. The *karanda* differs from the *kon* in having a rounder leaf and in bearing bulbs on the stems as well as on, the root. Until it is boiled the flesh of the bulbs is slightly bitter.
- 58. Kon or Goradu the Common Yam Dioscorea alata is grown in small quantities without water or manure in the hilly west round the edges of fields or in house-yards. It is planted in June or July and by October the root is fit to eat. If left till December the root grows two feet long and eight inches across. The plant, which is a creeper with longish pointed leaves, bears two to five tubes or roots which when boiled make an excellent vegetable.
- 59. Lasun Garlic Allium sativum according to Colonel Sykes is of two varieties a red and white. It is grown with the help of water and manure in good black soil and requires water once every ten or twelve days. Segments of the bulb are planted in any month, and mature in four or five months. All classes use garlic in their cookery. The leaves are eaten as a pot-herb.
- 60. Mula Radish Raphanus sativum according to Dr. Birdwood is of two varieties, D. radicula and oblonga, and according to Colonel Sykes is of four varieties, three of them the long, the short, and the turnip radish which are white and one which is red. Radishes are grown with the help of manure at any time of the year in garden lands and sometimes in dry-crop land during the rains. The leaves are fit for use in six weeks, the root in two months, and the plant bears pods or dingris in a fortnight more, and continues bearing for a month and a half. The leaves are eaten boiled as a pot-herb and raw as a salad. The root is eaten as a vegetable both raw and boiled.

- 61. *Rajalu* Arrowleaved Caladium Caladium sagitifolium, according to Dr. Birdwood of three varieties, is grown with the help of water and manure. The leaves are narrower and more pointed than *alu* leaves, and the stem leaves and bulb are eaten in the same way.
- 62. Ratalu Sweet Potatoes Convolvulus batatas of two varieties a white and red, of which the red is the smaller and sweeter, are grown in the eastern sub-divisions. It is raised from layers put down any time in the rains or cold weather, and with the help of water and manure comes to maturity in six months. The young leaves and shoots are eaten as a pot-herb. The root is eaten boiled and roasted. It is also dried, ground to flour, and made into fast-day cakes. The mature vine is excellent fodder.
- 63. Suran Amophophallus campanulatus is grown especially in the hilly west. It takes three years to mature. The root grows to a large size and though somewhat bitter is much esteemed as a vegetable. From a green tapering stem four or five inches in diameter at the base and about three feet long, five or six pennated leaves eighteen to twenty inches long shoot upwards and outwards. Every year the leaves and stem die and spring again.

Fruit Vegetables.

Twenty fruit vegetables are grown in Poona. The details are:

POONA FRUIT VEGETABLES.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|-----------------|--------------------------|---|
| 64 | Dhendshi | | |
| 65 | Dodke | Sharp-cornered Cucumber. | Luffa acutangula or Cucumis acutangulus. |
| 66 | Dudh- bhopla | The Long White Gourd. | Cucurbita longa. |
| 67 | Ghosale | | Luffa petandria. |
| 68 | Kalingad | Watermelon | Cucurbita citrallus. |
| 69 | Karle | | Momordica charantia. |
| 70 | Kartoli | | Momordica divica |
| 71 | Kashi- | Bottle Gourd, | Cucurbita lagenaria. |

| | bhopla, Kashi-phal. | False Calabash. | |
|----|------------------------|--------------------------|--|
| 72 | Kharbuj | Melon | Cucumis melo. |
| 73 | Khira, Khira Kakdi. | Common Cucumber | Cucumis sativus. |
| 74 | Kohala | | Cucurbita alba. |
| 75 | Padval | Snake Gourd | Trichosanthes anguina. |
| 76 | Parvar | | Do. dioica or cucumerina. |
| 77 | Tambda Bhopla. | Red Pumpkin | Cucurbita melopepo. Do. pepo. |
| 78 | Tarbuj | | |
| 79 | Tarkakdi | | Cucumis usitatiasimus or Utl-lissimus. |
| 80 | Tondli | | Coccinia indica, Momordica monodelphia. |
| 81 | Valuk | | |
| 82 | Vange | Egg-plant | Solnnum melongina. |
| 83 | Vel Vange | Tomato or Love- apple | Lycopersicon esculentum. |

- 64. *Dhendshi* is sometimes grown round the edge of gardens but generally in river-beds. It begins to bear about three months after it is sown. The fruit is about the size of the two fists and is white both within and without. It is eaten cooked as a vegetable.
- 65. Dodke the Sharp-cornered Cucumber Luffa acutangula or Cucumis acutangulus is grown with the help of water and manure in rich land in the centre and east of the district round the edges of other crops. It is grown in gardens at any time. In dry-crop lands it is sown in June-July, grows exceedingly fast and to a great size, and begins to bear in two or two and a half months, and goes on bearing for one or one and a half months. The fruit, which is dark *green* and six inches to a foot long, is seamed with sharp ridges from end to and. The fruit is eaten boiled. No other part of the plant is used.
- 66. *Dudh-bhopla* the Long White Gourd Cucurbita longa, a creeping plant, is usually grown in garden lands round the edge of the crops. It

begins to bear in two or three months. The fruit, which is sometimes thirty or thirty-six inches long, has soft white flesh. It is a common and favourite vegetable. The skin and seeds are used in *chatni*. It is also made into a sweetmeat called *halva*.

- 67. Ghosale Luffa petandria is grown and used in the same way as the dodke (No. 65). The fruit, the only part eaten, is smooth, the same size as the dodke, and marked lengthwise with light lines. If watered the plant bears for two years.
- 68. Kalingad Watermelon Cucurbita citrallus, a creeping plant, is sown in the cold and hot months in moist sandy spots in river beds, and manured when six weeks old. The fruit is smooth and round, dark green mottled and striped with a lighter green. The flesh is pink and the seeds black or white. It is eaten both raw as a fruit and cooked in different ways.
- 69. *Karle* Momordica charantia smaller both in plant and fruit, is grown and used like the *dodke* and the *ghosale* Nos. 65 and 67. The surface of the fruit is roughened with knobs and each seed fills; the whole cross section of the fruit. It is slightly bitter and must be well boiled before it is eaten.
- 70. *Kartoli* Momordica dioica is a wild but saleable gourd like *karle*. The fruit is eaten as a vegetable after two boilings.
- 71. Kashi-bhopla or Kashi-phal that is the Benares Pumpkin Cucurbita lagenaria is grown in gardens and sometimes on river-banks. Except that it is roundish and thick instead of long, the fruit is like the *dudh-bhopla*. It is only eaten cooked. [The names Kashi-bhopla and Kashi-phal are also given to a large white gourd of a flattened globular shape with depressed segmental lines.]
- 72. Kharbuj Melon Cucumis melo is sown in the cold and hot months in moist sandy spots in river-beds, sometimes with the watermelon. The plant is manured when six weeks old and the fruit ripens in the third or fourth month. The fruit is round, green, or yellowish, the skin covered with a network of raised brown lines. It is eaten uncooked in a variety of ways.
- 73. Khira or Khira Kakdi Common Cucumber Cucumia sativus of two kinds, green and white fruited, is sown in dry-crop lands in July and August round the edge of early crops or in garden lands at any time. It

begins to bear in about two months. The fruit is ten to sixteen inches long and is much eaten both raw and cooked.

- 74. Kohala Cucurbita alba is grown round the edge of gardens at any time of the year. It begins to bear in three or four months. The fruit is larger than the red pumpkin and the flesh is white. It is never eaten raw but is much esteemed as a vegetable and is made into a sweetmeat called halva.
- 75. Padval Snakegourd Trichosanthes anguina except that it is never raised in dry-crop land, is grown in the same parts of the district and in the same way as the dodke (No. 65) The fruit, which is about three feet long and two or three inches thick, is marked lengthways with white lines. It is eaten boiled as a vegetable. The Marathas use the leaves, stalk, and root medieinally.
- 76. Parvar Trichosanthes dioica or cucumerina is grown early in the centre and east along the edges of betel-leaf gardens. The fruit is small and green and is highly valued by the people as a medicine.
- 77. Tambda Bhopla Red Pumpkin Cucurbita melopepo or pepo is usually grown round the edges of garden lands. It is sown at any time of the year and begins to bear in about three months. The fruit is roundish and sometimes very large, about eighteen inches in diameter with reddish flesh. It is cooked as a vegetable, and the shoots and young leaves are used as a pot-herb. The seeds are also eaten. This pumpkin is called *dangar* in some parts of the Deccan.
- 78. Tarbuj [Sir G. Birdwood gives tarbuj instead of kalingad as the vernacular of Cucurbita citrallus the watermelon. Mr. Fletcher admits that tarbuj is sometimes used for kalingad. He thinks this a mistake and that the tarbuj is more allied to the kharbuj.] is generally sown with kharbuj the melon in the cold and hot months in moist sandy spots in river-beds. It is manured when six weeks old. The fruit is like the kharbuj in the colour of its flesh and seeds, but is rather longer. It is eaten as a fruit and in salad.
- 79. Tarkakdi Cucumis usitatissimus or utilissimus is usually grown in river-beds in the cold and hot weather. The seed is planted in the moist sand and the plant is manured when about three weeks old. It ripens in about two and a half months. The fruit, which is smooth and about two feet long, is much eaten both raw and cooked.

- 80. *Tondli* Coccinia indica or Momordica monodelphia is grown in the same parts of the district and in the same way as the *dodke.* (No. 65). The fruit is a little smaller than a hen's *egg* and when ripe is red. It is eaten as a vegetable, but is never given to children as it is supposed to blunt the faculties. There is a bitter variety which is useless. The vine sometimes lasts for years.
- 81. Valuk is grown during the rains round fields of dry crop and at other times in garden lands. It bears in about three months. The fruit is eight or ten inches long and is yellowish marked lengthwise by lines. It is sweet and is eaten raw and cooked.
- 82. Vangi or Baingan the Egg-plant Solanum melongena is grown with the help of manure and water in considerable quantities; in rich soil often on river-bank mud in the centre and east and in gardens over the whole district except the west. In gardens it is sown at any time of the year. In dry land it is sown in June in seed-beds, planted during July, begins to bear in September, and if occasionally watered goes on bearing for four months. Its oval egg-like and slightly bitter fruit is one of the commonest and best of Deccan vegetables. It is boiled and fried, made into pickle, and sometimes slit and dried in the sun and kept in store under the name of usris. The leaves are said to be good for cleaning pearls. Hindus hold it wrong to use the stem as fuel. Besides the oval-fruited baingan there is a sort called bangali with fruit sometimes two feet long. There is also a wild variety called dorli vangi with a small and nearly round fruit.
- 83. Vel Vangi Tomato or Love-apple Lycopersicon esculentum with the help of manure and good soil is grown in small quantities all over the district and chiefly near large markets in the centre and east. It is grown in gardens at any time. In dry-crop land it is sown in June or July and fruits in October. The fruit is eaten both raw and cooked. The tomato was brought to India from Brazil by the Portuguese.

Pod Vegetables.

Four pod vegetables are grown in Poona. The details are:

POONA POD VEGETABLES.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|--------------------|----------|------------|
| 84 | Abai or kharsam | | |

| | bli. | | |
|----|---------|---------------------|---|
| 85 | Bhendi | Eatable Hibiscus | Abelmoschus csculentus or Hibiscus esculentus. |
| 86 | Ghevada | | Dolichos lablab |
| 87 | Govari | | Cyamopsis psoralioides or Dulichos fabaeformis. |

- 84. Abai or Kharsambli, a creeping plant, is grown without water or manure near houses or on the edges of garden lands in all parts of the district. It begins to bear in three months and in good soil goes on bearing three or four years. The pod when very young and tender is used as a vegetable.
- 85. Bhendi Eatable Hibiscus Hibiscus esculentus is of two varieties gari or early and hali or late. Both are grown in gardens in all parts of the district and all the year round. They are also grown without water but often with manure. As a dry crop the early or gari bhendi with large leaves and short thick pods is sown in June, grows about two feet high, and bears from early August to December. The late or hali bhendi, with small leaves and thin prickly pods, is sown in June or July along the edges of or among bajri crops, grows seven feet high, begins to bear in late September, and goes on bearing till the end of November. Both kinds are grown in garden lands all the year round. The green pods are eaten boiled as a vegetable or fried. The ripe seeds are used in curry and chatni. The bark yields a fibre which is seldom used.
- 86. Ghevda Dolichos lablab is of many varieties, the chief being the black-seeded, the white-seeded, the bot or finger-like, pattade or the hanuman, and the white with curved white pods. It is grown with or without manure and water. It is sown in June or July on the edges of dry crops, begins to bear in October, and goes on bearing till January. As a watered crop it is grown round gardens or in the yards and porches of houses, where it goes on bearing two or three years. The pods are eaten boiled as a vegetable and the grain is used as a pulse.
- 87. Govari Cyamopsis psoralioides is grown in gardens at any time and during the rains on the edges or in the corners of the early grain crops. It begins to bear within three months and if watered occasionally goes on bearing for some months. The plant grows about three feet high with a single fibrous stem from which the pods grow in bunches. The pod is eaten green and is much prized as a vegetable.

Leaf Vegetables.

Twelve leaf vegetables are grown in Poona. The details are:

POONA LEAF VEGETABLES.

| No. | MARATHI. | ENGLISH. | BOTANICAL. |
|-----|--------------|--|---------------------------|
| 88 | Alvi | Common Cress | Lepidium sativum. |
| 89 | Chakvat | Goose Foot Chenopodium viride or album | |
| 90 | Chandanbatva | | Chenopodium. |
| 91 | Chavli | Hermaphrodite Amaranth. | Amaranthus polygamus |
| 92 | Chuka | Bladder Dock, Blister Sorrel. | Rumex vesicarius. |
| 93 | Math | | Amaranthus tristis. |
| 94 | Methi | Common Greek grass | Trigonella foenumgraecum. |
| 95 | Mohan or Rai | Mustard | Sinapis racemosa. |
| 95 | Pokla | | Amaranthus. |
| 97 | Pudina | Mint | Mentha sativa. |
| 98 | Rajgira | | Amaranthus Candidas. |
| 99 | Tandulja | Eatable Amaranth | Amaranthus oleraceus. |

- 88. *Alvi* Cress Lepidium sativum is grown in gardens as a pot-herb and for the seed which is esteemed good for women after child-birth and is used in poultices for bruises.
- 89. Chakvat Goose Foot Chenopodium viride or album is usually grown in gardens, but sometimes in corners of early grain fields It is ready to cut a month after sowing. The plant is much esteemed as a pot-herb.
- 90. Chandanbatva Chenopodium is grown in all garden lands at any time of the year. The plant stands twelve to eighteen inches high and

has the new leaves of the upper shoot red. The leaves and stalk are eaten as a pot-herb.

- 91. Chavli Hermaphrodite amaranth Amaranthus polygamus is grown in gardens at any time of the year. It closely resembles tandulja but seldom grows more than six inches high and the leaves and stem are uniformly green. The leaves are eaten as a pot-herb.
- 92. Chuka Bladder Dock Rumex vesicarius is grown in gardens at any time of the year and is ready for use about a month after sowing. The plant is eaten as a pot-herb and has a pleasant bitter flavour.
- 93. Math Amaranthus tristis of two varieties red and green, is grown in gardens at any time of the year and is fit for use five or six weeks after sowing. [Sykes mentions three varieties and gives A. oleraceus as the botanical name.] The red variety stands three to five feet high, with a thick stem and has a small central plume as well as side flowers, and the leaves and especially the stem have a red tinge. The green variety is smaller The leaves and young shoots are eaten boiled. A wild amaranth called kate-math is much eaten by the lower classes.
- 94. *Methi* Common Greek grass Trigonella foenumgraecum is grown in gardens in all parts of the district. It is sown at any time of the year, and with the help of water and manure is fit to cut in about three weeks, and is mature in two and a half months. When young the entire plant is eaten as a pot-herb by all classes. The seed is given to cattle as a strengthener and is much used as a condiment in curry. The mature stalks are an excellent fodder.
- 95. Mohari or Rai Mustard Sinapis racemosa of two kinds, red and black, is either grown at any time of the year in gardens or during the cold season round fields of wheat or gram, or among wheat and linseed [Sir G. Birdwood mentions four varieties S. ramosa, S. glauca, S. dichotoma, and S. jauncea.]. The leaves and green pods are eaten as vegetable. The seed is used in curries and relishes, a medicinal oil is extracted from it, and it is powdered and applied as a blister.
- 96. Pokla Amaranthus of two kinds green and red grows one or two feet high in gardens at any time of the year. The leaf which is eaten as a pot-herb is ready for use in six weeks.
- 97. *Pudina* Mint Mentha sativa is grown in garden lands. It is a perennial and needs an occasional watering. The leaves are used as a garnish.

98. Rajgira of two varieties red and green Amaranthus candidus is grown in gardens at any time of the year and sometimes among watered wheat. [Sir G. Birdwood names them A. tricolor and A. viridis. Bom. Gov. Sel. CXXIII. 204 gives A. polygamus or pendulus.] In the green variety the seed plume is deep crimson and the stem and leaves are tinged with crimson, otherwise the varieties do not differ. The plant stands three to five feet high and has a heavy overhanging central seed plume. The seed is exceedingly small and is usually trodden out by human feet or rubbed out by hand. It is much eaten on fast days either as *lahi* which is made into balls or in cakes made from the flour of the parched grain. The leaves are commonly eaten as a pot-herb.

99. Tandulja Eatable Amaranth Amaranthus oleraceus is grown in gardens at any time of the year and is fit for use five or six weeks after sowing. The plant grows a foot high and has the stem red near the root. It has no seed plume, but flowers at each of its side shoots. Only the leaves and top shoots are eaten as a pot-herb.

The Vine.

Draksha the Vine Vitis vinifera is occasionally grown in the best garden land on the east border of the western belt and near Poona. The vine is grown from cuttings which, are ready for planting in six or eight months. It begins to bear in. the third year and is in full fruit in the sixth or seventh. With care a vine goes on bearing for sixty or even it is said for a hundred years. The vine is trained in one of two ways. It is either supported on a stout upright often a growing stump which is pruned to a pollard like shape about five feet high, or a strong open trellis roof is thrown over the vineyard about six feet from the ground and the vines are trained horizontally on it. The vine supported on living pollards is said to pay best; the trellis-trained vine is the better preferred by the rich for its appearance and shade, and is said to encourage growth to a greater age. The vine yields, sweet grapes in January February and March, and sour grapes in August. The sour grapes are very abundant, but are not encouraged as they are of little value; the sweet grape is tended in every possible way, but is apt to suffer from disease. After each crop the vine is pruned and salt, sheep's dung, and dry fish are applied to each vine after the sour crop is over. Vines are flooded once in five or six days, the earth being previously loosened round their roots. Blight attacks them when the buds first appear and is removed by shaking the branches by the hand over a cloth into which the blight falls and is then carried to a distance and destroyed. This operation is performed three times a day, till the

buds are an inch long. Six varieties are grown: *kali* or black, a long fleshy grape of two kinds, *abhi* a large round white watery grape and *phakdi* a long somewhat fleshy white grape, *sahabi* or *kerni* a long white sweet grape, *bedana* the seedless a small round sweet and white grape, *sultani* or royal a large round bitter white grape, and *sakhri* or sweet a small round white and very sweet grape.

COFFEE.

Coffee was grown in 1839 by Messrs. Sundt and Webbe in their garden at Mundhave, five miles north-east of Poona. The Bombay Chamber of Commerce considered it excellent both in quality and cleanness, and said it would fetch the same price as the best Mocha coffee, or about 2d. the pound (Rs. 14 the Surat man of 40 pounds). To encourage the experiment, Government granted Messrs. Sundt and Webbe ten acres of land close to their garden. Red gravelly soil, according to Mr. Sundt, is the beat suited for the coffee plant. The plant when young requires a great deal of shade. When about a year old it is planted in open ground where for at least four years, it must be screened from the extreme heat of the sun. To shade the coffee bushes Mr. Sundt grew castor-oil plants round the young trees. It wants no manure and water only fifteen or twenty days during the dry season. Mr. Sundt thought that much of the Poona soil was admirably suited to the coffee plant. He particularly recommended some spots of red gravelly soil between Khandala and Karla. [Bom. Rev. Rec. 1241 of 1841,75-76.] In 1842-43 Messrs. Sundt and Webbe grew plants from seed furnished them by Colonel Capon direct from Mocha. They had 7000 seedlings in their nursery ready for planting, and several berry-bearing trees which were fair specimens of fine coffee plants. A sample of coffee was submitted to the Chamber of Commerce who considered it equal to Mocha coffee. [Bom. Rev. Rec. 1568 of 1844.]

SENNA

In 1842-43 the Senna plant was grown in the Junnar sub-division by Mr. Dickinson and Dr. Gibson who supplied trees to several landlords. [Rev .Rec. 1568 of 1844.]

COCHINEAL.

About the year 1840 an attempt was made to introduce the cochineal insect into the Deccan. The attempt was unsuccessful, not because the climate was unsuited to the insect, but because the only insect that

could be procured was of the very smallest and worst kind known as the Cochineal Silvester. [Rev. Rec. 1241 of 1841,71 -72.]

SILK.

[Silk in India, by Mr. Geoghegan, Under Secretary to the Government of India (1872), 30-43.]

In October 1829, Signor Mutti, a native of Italy, offered his services to the Bombay Government as superintendent of any establishment that might be formed for the cultivation of silk. Government declined his offer but gave him to understand that liberal encouragement would be given to any one who might wish to grow silk on his own account. Encouraged by this assurance Signor Mutti resolved to attempt to grow silk. On his application in April 1830 the Collector of Poona was directed to make over to him the Kothrud garden in the town of Poona free of rent for fifteen years, on condition that the ground should be applied only to the growth of the mulberry. To this in 1830, 1831, and 1832, several plots of land were added. Lord Clare, then Governor of Bombay, took a strong interest in the subject, urged the desirableness of supporting Signor Mutti, and made him an advance of £600 (Rs. 6000). The Collector was at the same time authorised to remit the rent for six years on land cultivated with mulberry and to make advances for wells. In consequence of some disagreement between Signor Mutti and his partner Sorabji Patel most of the lands assigned to Signor Mutti had to be resumed; but he was left in possession of the Kothrud and Dhamdhere gardens. [Mr. Jacquemont, the cynical French traveller and botanist, met Lord Clare at the Kothrud garden. Of several experts present each gave his opinion. Mr. Mutti for mulberry trees, and Dr. Lush, who had a botanical garden at Dapuri, for mulberry hedges. Each kept to the opinion he had brought with him and in the evening they left Kothrud as they came, Dr. Lush to grow mulberry shrubs, Mr. Mutti to plant trees, the Parsi to set rid of his investment, and the Government to think over it all. Voyages, III. 580.] About the same time (1829) Mr. Giberne's experiments in growing silk in Khandesh attracted the attention of the Bombay Government, and the Bengal Government were asked to send to Bombay five convicts with their families who were skilled in the management of silk-worms and in the winding of silk. These men brought with them a quantity of eggs and were attached to the jail at Poona. But from want of careful supervision they appear to have done little either in the way of producing silk or of teaching. At the same time Mr. Owen, the surgeon at Sirur, began to manufacture silk upon a limited scale. The growth of his mulberries and the fineness of the fibre showed that the soil and

climate of that place were most favourable. Excellent Silk was also produced at the Poona jail. [Malcolm's Government of India, Appendix A. 69. As the culture of silk was abandoned at Dhulia in Khandesh, Government determined to centre their efforts on Signor Mutti's experiments. In 1837 he was appointed temporarily on a monthly salary of £25 (Rs. 250) with a native supervisor on £5 (Rs. 50), and was allowed to spend not more than £10 (Rs. 100) a month in starting mulberry plantations. On the 21st of July 1838, Signor Mutti submitted his first report as superintendent of silk culture in the Deccan. According to this report, besides 567,081 slips and 4252 standard trees planted by-husbandmen in the Deccan, Konkan, and Bombay, there were 49,850 slips in the Government nursery at Sasvad. Signor Mutti had also at Kothrud several persons whom he had instructed in all the branches of silk-making and had succeeded in making them smart, intelligent, and active. [Mr. Mutti had collected many cocoons of a silk-warm probably Bombay (Saturnia) my litter, said to breed wild near Poona of which he got basketfuls from the children at a very cheap rate. The green mucus of the animal made it very bard to clean. Still Mr. Mutti reeled it. It was a clear yellow, but with little gloss. Bengal Brahmans were said to make beautiful stuff of it. Jacquemont's Voyages, III. 580-81.] He had also received the most satisfactory reports of his silk from London, Glasgow, and Manchester, where it had been valued as high as 23s. 26s. and 29s. though reeled independently by natives. Upwards of twenty natives were reported to be acquainted with the winding of silk; and the people were said to be ready to take to silk-growing. In 1838, a sample of silk produced by Signor Mutti was sent for report to Mr. Joseph Ewart, a Manchester silk-broker, who reported that the thread was very good, being clean and even, and in every way showed excellent management on the part of the grower; that the silks would always be saleable as they would command a decided preference over the Bengal silks then imported, and come into close competition with Italian silks. The 1839 report is not so flourishing. Drought, the incursions of cattle, and neglect had much injured the mulberry bushes. Still the superintendent was sanguine. The dislike of the natives to plant mulberry trees, rear worms, and wind silk had been overcome, and several were engaged in making proper mulberry nurseries and transplanting and pruning the trees. The system of planting the mulberry bushes without earth had succeeded well and proved economical; the quantity of eggs produced by the butterflies had increased; they were regularly hatched and the cocoons had grown to the size of the yellow and sulphur varieties. At Kothrud the cocoons were so large that 1000 would yield two pounds (1 sher) of silk, and the people had shown themselves able to wind superior silk. The value of the mulberry plantation had

been shown by the sale of the leaves. The leaves brought for feeding the worms at Vadgaon had been purchased from the husbandmen at 1%d. (% a.) the pound; the greater part were the prunings of mulberry plants under one year of age from the villages of Chinchuri, Vadgaon, Narayangaon, Savargaon, Gunjalvadi, and Malegaon. The people of Shivner and Pabal owed every inclination to plant the mulberry tree. The plantations were usually found in channel-watered places. The mulberry trees grew among plantains and sugarcane which did not appear to injure them and almost all kinds of produce could be grown under the trees which were usually ten to twelve feet part. The people showed great anxiety to possess worms in order to produce cocoons. All dislike on the part of the Brahmans to the making of silk was overcome. They were ready be wind the silk from the cocoons which could only be done by removing the cocoons it boiling water, thus depriving the grub within the cocoon of life Many Brahmans were thus employed. They were also ready to engage in rearing worms and in winding silk in their own houses. Bom. Rev. Rec. 1314 of 1842, 67.]

In 1839, the advance of £600 (Rs. 6000) granted to Signor Mutti was written off in consideration of the benefit his exertions were calculated to confer on the country and of the loss to which he was subjected by ineffectual attempts to introduce the bush system of growing mulberries, a system afterwards abandoned by him in favour of standards.

In 1840 Messrs. Daniel and Co. started an establishment to plant mulberry bushes with the view of rearing silk-worms on a large scale. In spite of the opposition of the superintendent of silk culture they bought 533,800 cuttings with which they planted twenty-five acres of land near Narayangaon in Junnar, besides 16½ acres (22 bighas) of land at Sasvad in Purandhar. They had also 500,000 cuttings in different gardens under their management. Mr. James on their behalf reared 25,000 worms at Narayangaon, which gave thirty-five pounds $(17\frac{1}{2} \text{ shers})$ of cocoons. From some of their eggs he had nearly a *lakh* of cocoons in his garden. All this was done in four months. Mr. James spoke highly of the bush system, but by no means wished to discourage the planting of trees. He stated that if hedges were grown between the trees, it lightened the expense so much that the planter could afford to encourage their growth. Hedges he considered absolutely necessary to the success of any person rearing silk-worms and attributed Signor Mutti's failure to the want of hedges. [Bom. Rev. Rec. 1241 of 1841, 75 -76. Messrs. Daniel & Co. also established three silk-winding places or filatures, one at Kothrud near Poona, a second at Sasvad, and a third at Narayangaon. At Narayangaon there

were a number of worms and cocoons. The cocoons were inferior to Signor Mutti's cocoons both in size and softness. This was supposed to be due to the fact that bush leaves had not the same strength and nourishing power as tree leaves. A number of acres were grown with the bush, but its appearance was not healthy. [Bom. Rev. Rec. 1344 of 1842, 70.] In 1840, Signor Mutti went to Egypt on sick leave, and an honorarium of £200 (Rs. 2000) was given him and £40 (Rs. 400) to Mr. Ramos his assistant. An increase of £5 (Rs. 50) to Signor Mutti's pay was also sanctioned by Government. In June 1840 Signor Mutti returned to India. Of his operations for the next three years distinct accounts have not been obtained. The Government seem to have been satisfied with his proceedings. In 1843 Sir G. Arthur, then Governor of Bombay, recorded a minute strongly advocating perseverance in silkgrowing. In this year, according to Signor Mutti's report, in Poona, Sorabii Patel had extensive plantations of several thousand mulberry trees two to ten years old and made a small quantity of silk. There were besides 1400 mulberry trees three to seven years old in the station of Poona, and 50,806 trees one to five years old belonging to 317 individuals in thirty-six villages. There were also mulberry hedge rows. In two villages two Brahmans had reared worms and made good cocoons. One reared 61,000 worms with considerable success and a profitable result. Signor Mutti had mulberry plantations at Kasimbag Vadgaon, Chinchore, Chas, Nanuri, Sankora, Narayangaon, Harvi, Utur, Hudapur, Dingora, Junnar, Manchar, and Ausri. [Bom. Rev. Rec. 1344 of 1842, 60.1 He also mentioned six breeding places under his superintendence. At one of these, Savargaon, there were 35,000 worms. Reeling was carried on at Vadgaon. It was asserted that worms could be reared with less risk and in a shorter time than in Europe and that the worms were as good as were required for the higher qualities of Italian silk. The introduction of the art of winding, it was thought, wanted careful supervision at the outset, and the Collector of Poona was directed to continue the office of superintendent for five years longer, to erect four buildings for rearing worms in the Junnar or Pabal sub-division at a cost not exceeding £500 (Rs. 5000) as public property, and to conduct the breeding of worms and the making of silk on account of Signor Mutti himself or some private individual. Houses for rearing worms were accordingly built at Poona and Kasimbag Vadgaon. The Collector was also authorised to advance £200 (Rs. 2000) as a loan without interest to Signor Mutti to be repaid by instalments of £10 (Rs. 100) a month and to place £300 (Rs. 3000) at the disposal of the superintendent to be advanced by him to villagers who were anxious to grow silk. Signor Mutti established permanent winding places or filatures at Junnar, Dingora, and Narayangaon. He had 400,000 worms in these places,

and had been able to wind 160 to 200 pounds of silk a year. [Bom. Rev. Rec. 1569 of 1844,81-89.] Shortly after this date Signor Mutti fell ill, and Mr. Ramos was appointed to act for him.

In 1845 doubts of the success of the silk-growing experiment began to be raised. In 1847 a committee was appointed to report on the subject. The two members Dr. Gibson and Mr. Davidson joined in the opinion that any further attempt by Government to grow the mulberry with a view to the making of silk in the Deccan was not likely to succeed. Dr. Gibson expressed the decided opinion that neither bush nor standard could be profitably grown in the Deccan, and that the results shown by Signor Mutti had been due to an artificial stimulation, which deceived both Government and himself. Mr. Davidson agreed with Dr. Gibson, and Government ordered that all silk operations should cease.

No further attempt was made to grow silk till in September 1875, a sum of £250 (Rs. 2500) was placed at the disposal of Major G. Coussmaker, the superintendent of the photo zincographic office at Poona, to carry out tasar silk experiments. [Gov. Res. Genl. Dept. 2794, 15th Sept. 1875. Major Coussmaker began the experiments on the 1st of August 1875. Pictures showing the moths, cocoons, and caterpillars were sent to the Collectors and forest officers and to their native subordinates. Descriptive circulars were also sent in English, Marathi, Gujarati, and Kanarese, offering to buy seed cocoons at 1s. (8 as.) and burst cocoons at 6d. (4 as.) the hundred. He asked the native officials to submit fortnightly reports on facts which came to their notice. He also from time to time wrote and distributed fresh circulars as he found out new facts or drew fresh, conclusions. By these means a general interest in the collection of tasar cocoons was aroused and at a cost of £16 8s. (Rs. 164), Major Coussmaker received 62,216 cocoons by rail, post, cart, and headloads. Most of these cocoons came from the Konkan forests. The trees on which they were chiefly found were, in the Konkan, bor and guti Zizyphus jujuba and xylopyra, and Terminalia tomentosa, kanchan Bauhinia parviflora, karvand Oarissa carandats, and mal kangani Celastrus montana; and in Poona, Satara, Gujarat, and Khandesh, on these trees and also on *nandruk* Ficus benjamina, pimpri Ficus tela, dhavda Conocarpus latifolia, and lendeya Lager straemia parviflora. In the Panch Mahals they were also found on halda Chloroxylon sweeten. In the Konkan the men who collected them were to some extent Musalmans, Mhars, and Marathas, but chiefly Katkaris, Kolis, Kunbis, Varlis, and Thakurs, men who from February to May were in the habit of cutting branches to burn on their land. Major Coussmaker attempted to rear the worms in his office

building, in some of the rooms of his house, and in the veranda. Some of the cases and feeding trays were hung from the rafters of the rooms, from hooks and trees; others were fastened to uprights driven into the ground. In this way with wire and string netting and with bamboo chicks, Major Coussmaker succeeded in restraining the wanderings of the caterpillars and in guarding them from their enemies. But the food failed and batch after batch died from starvation. Between the middle of August 1875 and the end of October 1876 Major Coussmaker was hardly ever without moths. The gathering of the cocoons from the trees and moving them, shutting them in the baskets and bags, and generally disturbing them had the effect of repeatedly bringing out the moths during the months of February and March. Upwards of 100 moths were out every night and whenever a fresh batch of seed cocoons arrived, whatever the temperature or the time of year, moths came out in large quantities. The first supplies from the district officials arrived in February and included both full and empty cocoons packed in baskets and bags. On arrival it was not easy to find how many of the cocoons were full and how many were burst. The shaking had so disturbed them that the consignments were found to contain many moths more or less damaged. Major Coussmaker had all the cocoons moved to open trays and put into a spare room. The details for the eight months ending September show that on an average 529 females paired and 21,329 worms were hatched every month:

POONA TASAR EXPERIMENTS, 1875-76.

| MONTH. | Males. | Females. | Paired. | Worms Hatched. |
|-------------------------|--------|----------|---------|-------------------|
| February 10th - 29th | 355 | 419 | 48 | No record. |
| March | 1126 | 1217 | 399 | |
| April | 578 | 636 | 289 | 20,770 |
| May | 539 | 553 | 115 | 14,781 |
| June | 504 | 523 | 424 | 38,579 |
| July | 430 | 443 | 372 | 43,097 |
| August | 423 | 320 | 309 | 45,854 |
| September 1st- 10th | 142 | 120 | 89 | 7553 |

| Total 4097 4231 2045 170,634 |
|--------------------------------------|
|--------------------------------------|

Before the supplies from the districts came in, Major Coussmaker's men had gathered some 300 cocoons near Poona. These cocoons and the moths that came out of them, as well as the caterpillars which were hatched, were mostly sacrificed in experiments. The result confirmed Major Coussmaker's former experience that the males require more liberty than the females, that the females rarely moved from their empty cocoons or from the twigs on to which they crawled when their wings were stiffening, while the males flew away as soon as their wings were stiff enough. As during the rainy season several male moths were generally flying about, females, when tied out, were soon paired, their talc-like disks shining like little moons and drawing the male like the light of the glowworm. In this way Major Coussmaker succeeded in getting nearly all the females which came out during the monsoon of 1875 paired. His arrangements for rearing failed. His space was limited and his cages were badly aired, and though he hatched several hundreds he gathered only fifty cocoons. He afterwards moved into a larger house and gave the worms more room. He joined chairs and tables together with bamboos so as to make them form a succession of benches. On these benches he set bamboo mat trays and above the trays he hung twigs on strings, entirely giving up the indoor cage system. In some places he put rows of small pots with twigs in them, filling them with moist earth. This did not answer, as the caterpillars were more ready to crawl down the pots than up them and the free movement of the air was hindered. He therefore determined to trust to the strings alone. For a short time everything went well. Major Coussmaker had plenty of good fresh leaves; the worms were not crowded, and they grew considerably. But long before their fifty days of life were over, the leaves became hard or diseased, and though Major Coussmaker had abundance of leaves all were of inferior quality. During the whole season caterpillar after caterpillar pined and withered. Though from time to time the trees flushed and sent out fresh shoots, their efforts were spasmodic, and owing to the great scarcity of rain Major Coussmaker found it impossible to ensure a steady supply of suitable food. He found that many young worms crawled down the legs of the chairs and tables and disappeared. He accordingly changed his trays. He fastened ropes to the rafters and to hooks in the ceiling, and passing them through broken bottle fairleaders, so as to prevent the enemies of the worms climbing down or the worms climbing up, he made a succession of swinging trays, over which as before he set strings of twigs. This method greatly lessened the labour of tending; the worms were much more secure

and the ventilation was good. But again as in the year before food failed. Major Coussmaker changed the place of the swinging trays. Some, he tied to the boughs of trees, some in one veranda, some in another; but the food was no better. Ho let some loose on, trees in the station, but there were no fresh leaves and they died or were taken by the birds, squirrels, and lizards. On a range of hills a few miles out of Poona he found a grassy tract with many bushes and saplings of Terminalia, Lagerstraemia, and Carissa. Here he turned out some thousand worms and set men to watch them during the day. For some five weeks they did well. Then a very hot fortnight set in, the saplings and small bushes lost their leaves, and almost all the worms died. Major Coussmaker thought the failure was entirely due to the unprecedented drought. Although Major Coussmaker failed in rearing, he succeeded in breeding and in procuring fertile eggs. During the hot weather, when no wild males were flying, Major Coussmaker found it was little use tying out the females, but during the rains he was successful. From February to May he turned all the moths as they came into a bedstead shaded with mosquito curtains, and a fair proportion paired. After May he rigged the swinging trays as before, and in the mat trays resting on them he set the cocoons, covering the whole with bamboo chicks fastened like a pent-house about three feet high. After they came out of the cocoons the moths crawled up the chicks and there hung while their wings were expanding. Major Coussmaker found that several of the moths paired in these cages. Each morning he looked at them, and leaving the pairs inside the cages undisturbed, he put the rest of the moths into a large basket and covered them. About four in the afternoon he looked at them and found that several of them had paired. These were left undisturbed; and all the unpaired females were tethered to a small trellis-work. At dark, this frame was hung to a tree, and all the unpaired males were set free near it. In the morning most of the tethered females were paired. The frame was brought indoors and hung out of the way. Care was taken to use no force in separating the pairs. They were always allowed to free themselves. After they were free the females were put under inverted baskets to lay their eggs, and the males were put into a basket to be set free at sunset. By following this system, most of the females paired and their eggs proved fertile, but the average outturn of eggs was less than Major Coussmaker had formerly noticed, only 106 to each moth. Major Coussmaker did not have the eggs counted, only the number of worms hatched. Major Coussmaker's head silkworm tender was a Maratha widow, who had been taught in the female normal school at Poona. It was chiefly from her that he received the figures quoted above. She made every effort to keep the worms alive, closing windows and doors, hanging up wet cloths,

putting khaskhas tatties to the doors, sprinkling the twigs and dipping them in water; but all was of no avail. Death returns kept by Major Coussmaker showed that of the worms that died two-thirds were under a week old. Of 170,634 worms hatched between the 1st of April and the 10th of September only 2623 grew up and spun cocoons, This mortality in Major Coussmakers opinion was due to the want of suitable food. Under the head tender, Major Coussmaker had five lads, some looking after the worms in his garden and some, tending them in the bushlands on the hills near, and at odd times cleaning the burst cocoons and preparing them for the manufacturer. Most of the cocoons sent to Major Coussmaker were those of Antheraea paphia and belonged to the common variety of that moth. In September 1875, Major Bowie, Deputy Commissioner at Sambalpur, sent him some cocoons belonging to another variety called by the natives of the Central Provinces the Chhattisgad cocoon. These were larger, but much thinner and softer. The moths, though slightly darker, paired readily with the small hard-cocoon moth. As far as Major Coussmaker could judge the difference between the two was one of climate and feeding. The Chhattisgad moths were more delicate and limper. The remaining cocoons received from the Bombay forests were of Attacus edwardsii and of Cricula trifenestrata. Several moths of both these species came out but none paired. Attacus edwardsii seemed to be distributed over the whole Presidency and was found also in Masur; Cricula trifenestrata came from North Kanara only.

The tree which Major Coussmaker used for indoor rearing was the nandruk Ficus benjamina. The leaves travel well and long keep fresh. The tree has constant flushes of young leaves and being planted for shelter in many places along the roadside was in every way the best suited for a large experiment. At the same time, as they were neither pruned nor watered, the *nandruks* failed to yield a trustworthy supply of suitable leaves. Major Coussmaker tried the bor Zizyphus jujuba, but it quickly withered. Still on it, on the ain Terminalia tomentosa, the lendeya Lagerstraemia parviflora, and the karvand Carissa carandas, a few caterpillars grew to maturity out of doors. Mr. Woodrow, the superintendent of the Ganeshkhind Botanical Gardens, had also in the same year (1876-77) a small sum placed at his disposal by the Collector of Poona to make experiments in the growth of tasar silk. He laid down a great many cuttings of Ficus benjamina, and built a light roomy shed, with the sides and top of coir matting, a cheap and effective structure. Mr. Woodrow got a few seed cocoons and Major Coussmaker from time to time gave him fertile eggs. The result of his experiments was the same as of Major Coussmaker's. The moths bred freely in confinement and produced fertile eggs in abundance and in

due course the caterpillars appeared. But of the number that entered on the worm stage only about five per cent lived to spin cocoons and these cocoons were decidedly inferior to what might be gathered all over the country. Every now and again the caterpillars throve well, but when the quality of the leaves fell off, the caterpillars starved and died. At the close of his experiments he had 923 good cocoons. Mr. Lyle, an American employed on the Peninsula railway, tried a series of experiments in rearing silk-worms at his house near Dapuri. As he had no room or shed, he with great ingenuity made a set of large pens or cages fixed on uprights driven into the ground under some good shade-trees. The sides and tops of his cages were of bamboo chicks closely fastened together so that while sufficient air was admitted no caterpillar could escape, and none of the silk-worms' enemies could come at them; a coating of mixed tar and castor-oil prevented any enemy climbing the uprights. Inside his cages, Mr. Lyle stretched wires lengthways and hung the twigs on the wires. A good deal of light rain fell at Dapuri in the month of August when Mr. Lyle's cages were full, and the wind driving the moisture through the openings of the chicks kept the leaves fresh and the worms throve as well as on the trees. He got some cocoons from trees along the line and Major Coussmaker provided him with some fertile eggs. From these, which he began to rear on the 7th of August and which span by the 20th of September, he gathered 1509 cocoons, the majority of which were as fine as any forest reared specimens in the neighbourgood. He had a greater choice of food than Major Couss-maker, and managed to secure a superior quality of leaf throughout the forty-five days. He fed the worms on Ficus benjamina and Ficus tjiela twigs eighteen inches long laid very close together. In his opinion the worms seemed equally fond of both kinds. One objection to Ficus tijela was that when it dried or faded the leaf rolled up and, especially at moulting time, hurt the caterpillar renting on it. He also noticed that, if they had begun to eat one kind of leaf the caterpillars would not pass from *nandruk* to *bor* or from *bor* to nandruk. Mr. Lyle by accident found that the worms throve well on Lagerstraemia indica, a leafy, ornamental, flowering shrub found in most gardens. Both he and Major Coussmaker put some caterpillars on these trees and found that they grew enormously and spun very large cocoons. The chief experience gained by the year's experiments was that seed cocoons should be moved as little as possible; that feeding worms on twigs gathered from unpruned roadside trees was a mistake, as eighteen inch twigs have only three or four suitable leaves; that plantations should be made of trees and shrubs and that the trees should be pollarded; that when worms are fed out of doors the trees should be guarded by cages or nets and when under shelter the worms should be kept either in coir-matting sheds or in portable

pens or cages; that only the third, fourth, and fifth leaves from the end of the twig should be used, and that these twigs should be renewed three or four times a day; that the system of cages, baskets, and tethering ensures a supply of fertile eggs; that the eggs of the healthier moths should alone be kept for distribution or for home-rearing; that since the silk-mill in Bombay can work burst cocoons there is no need to kill a single chrysalis, all the moths should be allowed to come out of the cocoons; that after the moths come out the cocoon should be carerally cleaned, all pieces of leaf or twig brushed off, and all cast skins and chrysalis picked from the inside; that the habits of the trees or shrubs used for feeding the worms should be carerally watched to find how best to ensure a steady supply of suitable food.

As regards the working of the tasar cocoons into fabrics Major Coussmaker carried on a correspondence with Messrs. Tapidas Varajdas and. Co., secretaries and treasurers of the Alliance Spinning and Weaving Company Limited, of Bombay, and placed the vole matter in their hands. He sent them 112 pounds of cocoons cleaned as well as his labourers could clean them without boiling them. Messrs. Tapidas and Company found that the cocoons yielded about forty per cent of pure silk and about thirty per cent of noils and refuse. The remaining thirty per cent, which was lout in the boiling, in Major Coussmaker's opinion was the natural cement, the dirt, and foreign matter left by the cleaners. Some of the forty-five pounds of silk that remained was woven into tasar cloth, some into tasar poplin, and a considerable quantity was used in experiments made with the view of bleaching it. Messrs. Tapidas and Company were not able to put any value on the material either in the form of cocoons, of yarn, or of piecegoods, as there was no demand for tasar. They could not use it unless it could be supplied as white or nearly as white and as capable of taking every dye as the B. more silk. [Major Coussmaker's Report to Government, 20th November 1876.]

In 1877, the Bombay Government sanctioned the payment to Major Coussmaker of £50 (Rs. 500) as an honorarium. [Bom. Gov. Res. 597, 22nd February 1877 (General Department).] At Ganeshkhind the first cocoons seemed fertile, but only about live per cent of the caterpillars lived to spin. The second generation did not come to maturity.

In the course of his inquiries Major Coussmaker got a sample of fibre much superior to any Indian specimen he had seen, though inferior to Italian silk. He found that this fibre was produced by a hybrid of the tasar moth with the *yamamai* or oak-feeding moth of Japan. The

Bombay Government, in communication with the British officials in Japan, procured some eggs of the oak-feeding variety. Boxes of this seed were sent to various official and private experimenters. Those kept by Major Coussmaker seem to have been all killed by the dry heat of Poona, nor did those kept in Bombay by experienced and generally successful silk-growers fare better. It has been suggested that the *yamamai* breed should be introduced in the cocoon state, but it is extremely doubtful whether the true cause of their failure is not the absence of any leaf of the oak family which is their natural food. The only tree to which they seemed to show the slightest partiality was the *nandruk* Ficus benjaminia, and even on that they fed for not more than four days. That the journey is not the cause of failure seems clear from the success with which this breed of silk moth has been carried from Yokohama across the United States to England, a journey of more than forty days.

In 1879, Major Coussmaker resumed his experiments. He set aside fifty cocoons of the 1878 crop for breeding. He also got from others a good supply of moths, many of which he allowed to escape as he had not food for many caterpillars. He kept some 10,000 eggs hoping to find food for them in Poona. But he failed to get more than 500 good cocoons from them of which he kept only a hundred. As before the great difficulty was to secure an unfailing supply of suitable food. To improve his supply, with the first promise of rain in June, Major Coussmaker set aside about one-sixth of an acre in his garden with, a southerly aspect. This he cleared of trees and bushes and laid it out in ridges four feet wide with side gutters. On these ridges he planted 340 feet of dhayti Lagerstraemia indica, 270 feet of bor Zizyphus jujuba, ninety feet of karvand Carissa carandas, 107 feet of ain Terminalia tomentosa, fifteen feet of arjun or sadada Terminalia arjun, and fortysix feet of *nandruk* Ficus benjamina. He found *dhayti the* most suitable plant. With liberal water it constantly threw out shoots covered with leaves which the worms ate greedily. The plant could be easily grown from the root. The bor was liked by the worms but the leaves were small and thinly scattered and were soon eaten. The karvand was leafier but a slow grower. The ain and arjun had larger leaves but were slow growers. The *nandruk* was a failure, it did not thrive and was not eaten. A dhayti plantation with bor and karvand hedges would yield plenty of food after the beginning of its third rains. Major Coussmaker kept all his seed cocoons hung on a wall out of reach of rats. So long as they were left undisturbed the moths came out only during the regular season. Large numbers died when cold October east winds set in. But the chief causes of death were preventable, shortness of food and attacks of insects, birds, mice, and other enemies.

In 1880-81, Major Coussmaker's crop of cocoons failed. He thought this failure was the fault of the cages. These were tarred screens of split bamboo. They kept out rats, mice, birds, squirrels, and lizards, but they were too dark; the plants did not thrive and the worms were always trying to escape. He made the cages longer and put netting at the top and everything throve till some wasps and other insects punctured and killed most of the silk-worms. He had about 30,000 clean perforated cocoons weighing about sixty pounds. He thought it best to go on collecting until he got about a hundredweight. In 1881, though the results were better, Major Coussmaker did not succeed in gathering a full season's crop of cocoons of his own rearing. His food supply was perfect and the cages kept out all the larger enemies of the worm; still there was much sickness and many deaths. Only 1000 cocoons were gathered. His first batch of worms hatched on the 2nd of May and the first cocoon was spun on the 6th of June. The last batch of worms hatched in the middle of November, but they gradually dwindled and came to nothing; the last worm died on the 8th of December. The whole season's collection amounted to 60,000 cocoons double of the 1880 collection. It was chiefly received from the Forest Department who sent 58,000 cocoons. Major Coussmaker had all these cocoons cleaned of extraneous matter. The outturn for the two years, 200 pounds of clean cocoons, was sent to Mr. Thomas Wardle of Lack in England. This was sold to Messrs. Clayton Marsdens and Company of Halifax at 1s. 3d. the pound. The spinners reported that the fibre was somewhat coarser than most tasar waste and the cocoons had been opened, but this was not a serious drawback to its spinning qualities. At this time, in Major Coussmaker's opinion, the prospects of the tasar silk industry were promising, every year showing an improvement. Major Coussmaker laid out a sixth of an acre as a dhayti or gulmendhi plantation. The land was laid out in ridges seven feet wide with a gutter of one foot between. The dhaytis were put into a trench of good soil mixed with manure in the middle of each ridge one foot apart. Where the ground was not filled with the cages, on each side of the dhaytis on the ridges vegetables were grown. Care was taken to lay out the ground in the way best suited for watering. The cages were tarred rectangular pieces of split bamboo screen-work, a cheap light material neither liable to be hurt by the weather nor to be gnawed by rats. In making the cages he tied the screens together, making the sides three feet high and the ends six feet wide. The cage could be pat up over the whole length of the hedge and was divided into twelve-feet sections. From side to side, arched over the top of the hedge, pieces of rattan had their ends fastened to the screens and the middle to a light ridge pole which rested on triangular screens. Over these hoops coarse open cotton was

spread. By this arrangement nothing touched the shrubs which were uniformly cut to a height of four feet and nothing tempted the worms to leave their food. There were three screens under the triangles. The middle screen was fixed and the two smaller screens on either side wer8 fitted with string hinges, allowing boys to go in and clean on both sides of the hedges without injuring the shrubs. When hatching, the worms were put on the plants near the door, and they ate away steadily crawling to the next when the first twig was stripped. As fast as they were eaten the bare twigs were cut off and fresh ones grew. After a few weeks the hedge was as thickly covered with leaves as when the caterpillars were put in, and this process went on as long as the rearing of the worms was continued. When the twigs in any section of the screen were stripped the screen was taken down and shifted along the hedge or to some new place. As a rule little water was required. In July 1882, Government held that the experiments conducted by Major Coussmaker proved that tasar silk could be grown with success in the Deccan. They proposed to continue the experiments, and hoped they would lead to the considerable growing of tasar silk. In 1882 Major Coussmaker increased his Lagerstraemia plantation to 1500 feet and his Zizyphus hedge to 300 feet. In February 1883, before retiring from the service, Major Coussmaker in a final report expressed his opinion that tasar silk-growing would not pay. Large imports from China had lowered the price of tasar waste in England, the Bombay cocoons were small and yielded little silk, and the gathering of wild cocoons or the rearing of worms were both costly. 6d, (4 as.) a hundred was the cheapest rate at which forest cocoons could be gathered and this was too high to admit of profit. The people did not find it pay them to leave their regular work and gather cocoons. It was only by the personal exertions of the forest officers that so much had been gathered. Major Coussmaker had nearly every year tried to increase the size of the cocoons by bringing large cocoons from Sambalpur, Yamtara, Manbhum, and other places, but with no success. The moths had paired readily with the small Deccan variety, the worms had hatched, but there was no difference in the cocoons. Major Coussmaker believed that the smallness of the Deccan cocoon was due to the climate and perhaps in a less degree to the food. As far as outturn went the result of rearing the tasar silkworm was satisfactory. Within six weeks Major Coussmaker had been able to gather three cocoons from each foot of hedge. In 1882 the first worm hatched on the 9th of May and the first cocoon was gathered thirty-two days later. The worms of this batch numbered 380 and 347 of them spun cocoons, beginning on the 7th and ending on the 24th of June. They consumed 110 feet of Lagerstraemia. Of 1800 feet of Lagerstraemia, one-half was sufficiently grown to yield a steady supply

of food. From these 900 feet between May and October Major Coussmaker gathered 5678 cocoons. Of these only about half, which were almost all gathered before the end of July, were sound and perfectly formed. Later in the season without any apparent cause he lost many pas of worms in all stages, some being the progeny of moths of the preceding year. Still many cocoons were spun, some of which were very fine, but the majority were weak and thin. These facts, his own former experience, and the information received in letters and printed reports showed that no reliance could be placed on any but the first crop of the season, the progeny of the moths which rest in their cocoons during the cold and hot seasons, and which emerge easily in the monsoon when the first showers of rain fall. Throughout the whole monsoon and often at other times, when disturbed, moths continue to appear but with an unsatisfactory result and much loss of life. Enough cocoons were spun to ensure a supply of seed cocoons, but not enough to call a crop. Major Coussmaker's arrangements had succeeded in guarding the worms and ensuring a steady supply of food. The labour bill was reduced to a minimum; one woman and one boy could easily look after at least an acre of hedge and keep the enclosures in repair. At the same time if the southwest rains did not break early and heavily the hedges would have to be watered and the expense of enclosing would be very great. So long as tasar continued cheap this system could not pay. Crows, sparrows, squirrels, and rats gather near dwellings and must be kept out. Major Coussmaker succeeded in keeping the worms safe from their enemies, but the process was costly. Major Coussmaker having wound up his series of experiments, handed his plantation of Lagerstraemia and Zizyphus bushes, together with the bamboo screens and iron rods which he used for his enclosures, to the superintendent of the Central Jail at Yaravda. There is land attached to the jail and the head jailor took an interest in silk experiments.

EXPERIMENTAL GARDENS.

Shortly before 1841 an experimental garden was started at Hivra, about ten miles east of Junnar. In 1841 potatoes and sugarcane were the chief products. The market for the potatoes extended to Dhulia, Aurangabad, and Bombay, and the growth of sugarcane had greatly increased. Numerous other products were also tried. The chief wore, American maize, anotto dye for which there was a large demand in Poona hemp, and oil-plants. A valuable variety of rice the kamod Was introduced into the district, and thirty-eight kinds of choice wheat were received from Edinburgh. Dr. Gibson, the superintendent of the garden, considered the cultivation of cotton, cassa do or tapioca root,

and coffee unsuited to Poona. [Bom, Rev. Rec. 1455 of 1843, 176-7.] There was a similar garden at Government House at Dapuri, about eight miles north-west of Poona for which Government did not incur any additional expenditure, and Where several trees, including among others the India Rubber tree, were raised. In the nursery on the top of Shivner fort by the help of four Chinese convicts upwards of 200 exotic trees were grown and seemed likely to be useful The olive and cedar Nourished in some places in the plains, but at Dapuri the Soil was not good enough for the olive.

About the same time (1841) Messrs. Sundt and Webbe, two enterprising and respectable Anglo-Indians, had a well cultivated garden at Mundhve, about four miles east of Poona. Besides growing oranges, grapes, and other fruit they turned their attention to the cultivation of the coffee plant. In 1847 they had about a hundred healthy trees from which they realized a good crop, besides a thousand young plants ready for putting out. They also grew a little Mauritius sugarcane and made raw-sugar or *gul* from its juice.

BOTANICAL GARDENS.

The botanical garden at Ganeshkhind was started in 1873, and along with the Hivra garden, has since been under the superintendence of Mr. G. M. Woodrow. The principal object of these gardens is to supply the Medical Department with drugs. In 1872-73 the outturn of the gardens included 700 pounds of senna, 1300 pounds of henbane, and 1036 pounds of dandylion. During the same year the chief produce of the laboratory was 107 pounds of extract of colycinth compound, fiftysix pounds of extract of hyoscyamus, 1621 pounds of groundnut-oil, 7190 pounds of castor-oil, and eleven pounds of croton oil. In that year experiments were made with various artificial manures, nitrophosphate, citrate, dissolved bones, nitrate of soda, hop manure, and superphosphate. The income of the gardens amounted to £164 (Rs. 1640) and the expenditure to £154 (Rs. 1540). The laboratory receipts were £431 (Rs. 4310) and the expenditure £319 (Rs. 3190). In 1873-74 experiments were made with European artificial manures; the result was not satisfactory. It was proved that silt from the drains of Poona city is a valuable manure at least equal for one year's crop to dung from oil-cake fed cattle. Of the cork trees that were planted three years before, many had died and a few were struggling for life. One, which had grown six and a half feet high and four inches in circumference, appeared to be in perfect health. As this showed that the climate was not unsuited to the cork-tree, the Secretary of State was asked to arrange for the despatch of periodical supplies of cork-

tree acorns. Many new ornamental plants were introduced, the most valuable of which was the Exogonium purga, the plant which yields the drug jalap. Experiments were also made for the growth of fibre for paper. The income was £352 (Rs. 3520) and the expenditure £1222 (Rs. 12,220) besides £558 (Rs, 5580) spent on the laboratory building from a fund set apart for the purpose. In 1874-75, the income was £842 (Rs. 8420) and the expenditure £1257 (Rs. 12,570), The area under tillage was fifty-seven acres, seven of which were watered. One fact was ascertained that prickly-pear made a valuable manure if it was left to rot in a cistern through which the water of an irrigation channel was led. Some new descriptions of tree were added, A fairly successful attempt was made to grow vanilla. Flax was also grown of fair quality but of excessive dearness. Unsuccessful attempts were made to get paper from san stalks and plantain fibre. Most of the cork acorns brought from England arrived dead. In 1875-76, the income of the garden amounted to £660 (Rs. 6600) and the expenditure to £1268 (Rs. 12,680). The most important new introductions were Balsamocarpon brevifolium a plant yielding pods useful in tanning and the Liberian coffee. Cereal crops were raised with a view to selecting the seed. 3000 half-standard roses were ready for distribution. A list of the medicinal plants was printed and indents became more frequent.

In 1876-77, the income of the garden amounted to £951 (Rs. 9510) and the expenditure to £1285 (Rs. 12,850). Experiments with the Wagatea spicata, a climbing shrub, a native of the Konkan, showed that its seed-pods contained a high proportion, fifteen per cent, of, tannic acid. A satisfactory feature in the working of the garden was the extent to which its drugs, chiefly taraxacum and colocynth, were in demand. Experiments in the production of tasar silk were continued. In 1877-78, experiments were carried on with mahogany trees, the seed of which had been sent from Kew Gardens and planted in. 1874. The results seemed to show that the tree could be acclimatised and established if well watered during the first two years. The blue gum tree, Eucalyptus globulus, was found to thrive well for four or five years and then to die off. The superintendent was of opinion that an exotic which like the gum tree did not go to rest at any time of the year was sure not to succeed. Cinchona, though it grew well in the conservatory, died in the hot season if planted out. Taraxicum was grown with success. The tasar silk experiments were not satisfactory. The income of the garden was £516 (Rs. 5160) and the expenditure £1200 (Rs. 12,900). The Ganeshkhind gardens, which were originally intended merely as a nursery for the growth oflocal medicinal plants, under the supervision of a scientific gardener had assumed a botanical character, In 1878-79, a committee was appointed to consider how

the locality could best be developed for the purpose of botanical experiments and instruction. The suggestions of the committee were considered by Government and it was decided that the gardens should be constituted the recognized chief botanic gardens of the Presidency and that arrangements should be made for forming in them as complete a collection as possible of the local plants of Western India, a herbarium of which was to be kept permanently on the spot, along' with a select library of diagrams and botanical works of reference. The manufacture of oil was discontinued and the superintendent was instructed to manage the gardens with the view of making them of purely botanical and scientific utility. Botanical teaching was begun at the end of February 1879 by means of lectures at the gardens and at the College of Science and at the deccan College in Poona, with illustrations of specimens collected by the superintendent. The average attendance was fifty-one students.

Experiments with Nankin cotton showed that it could not be profitably grown in the Deccan. The sample sent to the Bombay Chamber of Commerce was estimated to be worth £5 (Rs. 50) less than the common samples of Dholera. The forage plant, Reana luxuriens, was found to be no better than sugarcane when grown in rich soil and irrigated, and worse than *ivari* when treated as a dry crop. The income of the garden was £740 (Rs. 7400) beaides £134 (Rs. 1340) the value of the oil on hand, and the expenditure £1282 (Rs. 12,820), that is a net cost of £408 (Rs. 4080). In 1879-80, the room formerly occupied by the oil-pressing machinery was partially fitted as an herbarium and specimens of about 1700 species were arranged according to their natural orders. Some of these were identified and the rest were sent to the Royal Herbarium at Kew for comparison. Considerable additions were made to the library which was used by a large number of botanical and agricultural students. Botanical teaching was continued during the year at the gardens and at the adjacent Poona colleges. The average attendance at the gardens fell from fifty-nine to nineteen as the students were allowed to pass the examinations without attending at the gardens. Six trained native gardeners or *malis* were sent out during the year and the demand for trained men continued much greater than the supply.

Experiment with the thornless opuntia or prickly-pear, which can be easily skinned and is then a favourite food for cattle, showed that it grows freely as a fence and is not likely to prove troublesome as it does not grow from seed. The yield of the forage grass Euchleina luxurious seemed nearly the same as that of guinea-grass. A crop sown in November and cut in April gave sixteen tons the acre of green

forage at one cutting. Fifty mango trees of the finest varieties were planted for stock from which grafts could be taken for distribution. The demand for imported seeds had risen from £69 (Rs. 690) in 1875 to £124 (Rs. 1240). Experiments with lucern grass seemed to prove the French variety superior to the acclimatised variety. The plant was quite as vigorous, the stalk was more delicate, and the seed was only half the weight. The receipts of the garden amounted to £946 (Rs. 9460) and the charges to £1554 (Rs. 15,540). In 1880-81, additions to the herbarium brought up the collection to about 2080 species of which about 1080 were identified. Botanical teaching was continued at the gardens. A number of full grown specimens of Albizzia prooera, one of the local trees which during the cold season of 1878-79 had been transplanted without soil on the roots, showed satisfactory results. Euchleina luxuriens was again grown for forage. It proved a vigorous grass when highly manured and watered, but not superior to sugarcane. Twenty mango trees of the finest varieties were planted out for stock, raising to 102 the number of trees whose grafts were suitable for distribution. The demand for imported seeds was about the same as in the previous year. The garden receipts amounted to £340 (Rs. 3400) and the charges to £768 (Rs. 7680). In 1881-82 the general condition of the garden was improving and the number of visitors was increasing. The receipts, derived chiefly from the sale of fruit trees, vegetable, and flower seeds, taraxicum, and some timber, amounted to £637 (Rs. 6370) and the charges to £1046 (Rs. 10,460). A mangosteen plant from Singapore died from cold in November. The local kokam or wild mangosteen plants were in good condition. Potatoes received from the Secretary of State grew surprisingly well. In May 1882 the carob tree yielded a crop of fully thirty pounds weight of pods, the greater part of which were equal in size to the imported pods. An attempt to propagate this tree by layering failed, but by grafting was very successful. 447 mangoes were grafted with choice sorts at a cost of $10\frac{1}{2}d$. (7½ as.) each. The herbarium building was altered and repaired and numerous specimens were added. The superintendent Mr. Woodrow lectured on vegetable physiology and systematic botany and gave eleven garden demonstrations in systematic and economic botany. The average attendance was twelve students. Experiments were made in collecting the India rubberyielding milky sap of the Cryptostegia grandinflora, a beautiful climber. The average yield was found to be twenty grains and the acre yield twelve pounds. As the plants would not bear tapping more than twice a year, the yearly acre outturn would be twenty-four pounds of caoutchouc. The cost of collecting was 2s. (Re. 1) the pound, which might perhaps be reduced to 1s. (8 as.). The value of the India rubber may be estimated at 2s. (Re. 1) the pound. The result was therefore

not encouraging. In 1883, 2001 mango trees were grafted with choice sorts at a cost of 10d. ($6^{2/3}$ as.) each, and in 1884, 4000 more were prepared at a, cost of 9d. (6 as.) each.

In the Bund Gardens, the Soldiers' Gardens, and the Railway Gardens in Poona plants and flowers are grown purely for pleasure and ornament. Details are given in the account of Poona City in the chapter on Places of Interest.

BLIGHTS.

The district is plot subject to blights. As has been noticed wheat is occasionally affected by a disease called *tambera* or rust when the ear turns copper-coloured and withers. It is also subject to another disease called *garva* or *khaira*. These causes of failure do not often occur on such a scale as to affect the general harvest.

FIELD PLAGUES.

Locusts.

The animal plagues from which the Poona crops are most liable to suffer are worn Is, locusts, and rats. The damage caused by worms is confined gram and other pulses and is seldom serious. According to Sanskrit books locusts and rats are two of the six deadly plagues or its. [The six plagues are Excessive rain, Want of rain, Locusts, Rats, Parrots, and an Invading force. Of loss from locusts before the beginning of British rule no instance has been traced. Since 1818, four years, 1835, 1878-79, 1882, and 1883, have been marked by swarms of locusts. Of the 1835 Louis except a general reference to the damage done no particulars have bean, traced. [Bom, Gov. Rev. Rec 772 of 1837, 33-31.] In 1878-79, considerable damage was done by locusts to the early or *kharif* crops in parts of Bhimthadi and Purandhar. Mr. J. G. Moore, O. S.] In 1882, as in other parts of the Deccan, [In 1882, locusts appeared in Dharwar, North Kanara, Belgaum, Satara, Poona, Ahmadnagar, Nasik, Khandesh, Kolaba, Thana, and Ratnagiri. locusts, robably the; Acrydium perigrinum, [It is said to have been identified in Bombay with Pachifilus indicus, a locust peculiar to India. Dr. Kirby of the British Museum thought it a variety of the Acrydium perigrinum, Mr. J. Davidson, C. S. appeared in Poona, but did comparatively little harm. During May, the locusts moved north and north-east from Dharwar and North Kanara where they first peered. They did not stay long in Poona and by the beginning of June most of them had passed north and were breeding chiefly in Nasik and Khandesh. In the

beginning of October 1882, young swarms came from Nasik and Ahmadnagar, From Poona they crossed the Sahyadris and passed into the Konkan The injury caused by the locusts was confined to the west of the district. There were no locusts in Bhimthadi and Indapur, and few in Sirur or Haveli. In Maval about 160 square miles or about threesevenths of the subdivision suffered. Of 582 villages in Khed, Purandhar, Junnar, and the Mulshi petty division, 208 villages suffered more or less severely and in these 203 villages in about one-fifth of the area attacked the *kharif* or early crops were entirely destroyed. Elsewhere the injury was slight, and no special measures of relief were found necessary. They did little harm to the nachni, vari, and sava crops, and here and there, they touched a little rice, but the mischief caused was trifling. They seemed to be unable to eat the mature grain of rice and bajri, and they fortunately did not arrive until close on the early harvest. When the crops were reaped, the locusts disappeared drifting west. Nothing more was seen of them until May 1888, when, especially in the west of the district, they returned in swarms and through the whole of May and June, wherever they alighted, they turned fields, groves, and hill-sides pink. After resting three or four days they flew east leaving the trees as green as when they came. Heavy rain seemed to do them no harm. Towards the middle of June they were seen in pairs. After pairing the males died, and after laying their eggs during the end of June and the beginning of July the females also died. They laid their eggs in all kinds of places, from the dry slopes of bare hills to swampy marshes. The female works her tail about two inches into the ground and lays one hundred to 150 eggs. She gives out a glutinous fluid which in dry soil forms a crust round the eggs like an earthnut or bhuimug. In damp places the earth does not stick to the fluid and the eggs, like yellow pins' heads, are left open to the air bat apparently do not suffer. As soon as the locusts were known to be laying, orders were issued to destroy the eggs and the young locusts wherever they were found. The villagers were told that they must take an active part in destroying the eggs and that if they failed to exert themselves and their crops suffered, they would get no remissions. Each sub-division was divided into circles of three to six villages. Over each circle an inspector was placed belonging to the Revenue, Police, Educational, Forest, Vaccination, or Public Works departments, all branches of the administration zealously lending their aid. The inspector's duty was to urge the villagers to destroy the eggs and young locusts and to report daily whether the villagers were doing their duty. The efforts to destroy the eggs to a great extent failed. Where the ground was dry the holes were sometimes visible and eggs were found, but in most places the rain had washed away all trace of the hole and the search was fruitless. About the beginning of August

numbers of newly hatched locusts began to appear like small grasshoppers. To spread a knowledge of what the newly hatched locust was like the precaution had been taken to have eggs dug out of holes just after the female locust had laid, and kept in a frame enclosed by mosquito netting. When the frame locusts were hatched specimens were sent to each mamlatdar and shown to the people. Various means were adopted to destroy the young swarms. The Cyprus screen, introduced by Lieutenant Bor, R.N., was tried, but, as Lieutenant Bor admitted, it did not by the locusts was confined to the west of the district. There were no locusts in Bhimthadi and Indapur, and few in Sirur or Haveli. In Maval about 160 square miles or about three-sevenths of the subdivision suffered. Of 582 villages in Khed, Purandhar, Junnar, and the Mulshi petty division, 208 villages suffered more or less severely and in these 203 villages in about one-fifth of the area attacked the *kharif* or early crops were entirely destroyed. Elsewhere the injury was slight, and no special measures of relief were found necessary. They did little harm to the nachni, vari, and sava crops, and here and there, they touched a little rice, but the mischief caused was trifling. They seemed to be unable to eat the mature grain of rice and bajri, and they fortunately did not arrive until close on the early harvest. When the crops were reaped, the locusts disappeared drifting west. Nothing more vras seen of them until May 1888, when, especially in the west of the district, they returned in swarms and through the whole of May and June, wherever they alighted, they turned fields, groves, and hill-sides pink. After resting three or four days they flew east leaving the trees as green as when they came. Heavy rain seemed to do them no harm. Towards the middle of June they were seen in pairs. After pairing the males died, and after laying their eggs during the end of June and the beginning of July the females also died. They laid their eggs in all kinds of places, from the dry slopes of bare hills to swampy marshes. The female works her tail about two inches into the ground and lays one hundred to 150 eggs. She gives out a glutinous fluid which in dry soil forms a crust round the eggs like an earthnut or bhuimug. In damp places the earth does not stick to the fluid and the eggs, like yellow pins' heads, are left open to the air bat apparently do not suffer. As soon as the locusts were known to be laying, orders were issued to destroy the eggs and the young locusts wherever they were found. The villagers were told that they must take au active part in destroying the eggs and that if they failed to exert themselves and their crops suffered, they would get no remissions. Each sub-division was divided into circles of three to six villages. Over each circle an inspector was placed belonging to the Revenue, Police, Educational, Forest, Vaccination, or Public Works departments, all branches of the administration zealously lending their

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The people did not call the 1882 locust by the usual name of *tol* or the host-fly, but either *naktoda* that is nose-cutter or simply *kida* that is

insect. [Mr. W. Ramsay, C.S.] When born the 1882 locust was green and looked and acted like a cricket. As it grew, it shed its skin, became less green, and a brown streak appeared on its back and sides. It could almost always be known by its hammer head. When full grown it had a black streak from the bottom of the eye downwards. The wings were developed one above the other, the under wing was at first reddish and the upper wing gray, but the red tinge soon disappeared. About three months old, when they began to fly, the locusts were yellow. When full grown the body was about two and a half inches long and the folded wings, which had again turned pink, stretched nearly an inch further. In October and November in the backs of some of the full grown locusts between the wings small reddish tick-like parasites were found. It is not known whether these parasites caused suffering or mortality among the locusts. Another parasite found among locusts just coming to maturity was a stomach-worm like a guinea worm. This worm is said to have done the locusts no harm. No rewards were given for the destruction of locusts; the only expenditure was on screens and traps.

Rats

In 1878 rats appeared in several places and severely injured the rabi or late crops in the east of the district. Crops which Would have vielded a full or a three-quarters harvest were reduced to one-fourth or even less. In many places the people gathered the green ears as the only means of defence. Even then, when the ears were placed in a heap, it was difficult to keep the rats off by constant watching day and night. In 1879 the rats again caused much damage in Indapur and Bhimthadi. A reward of 2s. (Re. 1) for every hundred dead rats was offered and about 350,000 rats were destroyed. The rats were of three kinds, the Jerboa rat, the Mole rat, and the Large-eared field mouse. The Jerboa Rat, Gerbillus indicus, comes between the Kangaroo-like ierboa and the true rat. From January to March 1879 the Jerboa rats proved most widely destructive, and destroyed more grain than all the other rats together. It is called the *haran* or antelope rat. Its colouring is like that of the female antelope, its ears are prominent, and its eyes are large and gazelle-like. It is fawn-coloured above and white below. It has long black whiskers and a tuft of black or blackish hairs at the end of its tail. Its head and body are about seven inches long and its tail is more than eight inches long. Its forefoot is half an inch and its hind foot two inches long. It weighs six to seven ounces. It burrows among the roots of bushes or in the open ground and forms long galleries. These galleries have branches that, end in chambers which are several inches wide and are carpeted with dried grass. They do not

usually hoard their food, which consists of grain and roots, especially of the sweet roots of the harvali grass Cynodon dactylon. The female brings forth eight to twelve and sometimes sixteen to twenty young. In the dusk of the evening these rats, which may be recognized by their fine large eyes, may be seen leaping about in places where there are many fresh rat-holes. In 1879 they climbed the Indian millet stalks and cut off the ears. The Mole Rat, Nesokia indica, kala undir, also called koku or kok by the Vadars, may be known from the common Brown Rat, Mus documents, by its shorter body and shorter tail and also by being stouter and heavier. When chased it grunts like the bandicoot. In colour it is like the common brown rat, but there are fawn-tinted hairs mixed with the fur and it is lighter below. Its ears are small and round; its tail naked and short; its incisor teeth very huge, hat in front, and orange yellow. Its entire length is about thirteen inches of which the tail is six inches. The palm of its forefoot is nearly half an inch long and that of its hind foot an inch and a half. It lives alone and forms extensive burrows, sometimes fifteen or twenty yards in diameter. It stores large quantities of grain. The Vadars dig the ground and eat both the rat and its stores. The female brings forth eight or ten at a birth and drives her young from her burrow as soon as they can care for themselves. This rat is usually found near sugarcane fields. The people say that great numbers of these rats are yearly killed by the first heavy fall of the south-west rain. The black soil swells with heavy rain and the rats are caught in the holes and fissures and smothered The great increase of these and of the mettad rats in 1879 is partly accounted for by the absence of any sudden burst of rain in 1878 Under the influence of gentle showers, the black soil swells gradually and the rats escape suffocation.. The large-eared Field Mouse, Golunda mettada, mettad or mettangandu, was one of the chief pests It is a soft-furred mouse with a few flattened and spiny hairs among its fine close fur. Its colour is reddish brown with a mixture of fawn becoming lighter below. Its whole length is about ten inches a of which the tail is 4.3 inches. It is distinguished by its large ears which are two-fifths of an inch in diameter. The female produces six or eight young at a birth. This rat has long been known as a plague. It lives entirely in cultivated fields in pairs or small societies of five or six, making a very slight and rude hole in the root of a bush or merely harboring among the heaps of stones thrown together in the fields, in the deserted burrow of the kok, or in deep crackup and fissures formed in the black soil during the hot months. Every year great numbers perish when these fissures fill at the beginning of the rains. In 1879 these rats ruined some fields with their sharp incisors cutting cartloads of stalks every night and either eating the grain or dragging the heads into their burrows. Into other fields an army of rats suddenly entered and in a few hours ate up the grain like a flight of locusts.

FAMINES.

1397-1408.

During the last five hundred years, there is either traditional or historic mention of about twenty-five famines. The first is the awful calamity known as the Durga Devi famine which wasted Southern India at the close of the fourteenth century. The twelve years ending 1408 are said to have passed without rain. Districts were emptied of their people and for forty years the country between the Godavari and the Krishna yielded little revenue. The hill-forts and strong places, previously conquered by the Muhammadans., fell into the hands of local chiefs and robbers, and the country was so unsafe that the people who returned were driven from their villages. Dadu Narse and a Turkish eunuch of the Bedar court were appointed to resettle the land and call back the people. As the former village boundaries were forgotten, Dadu Narse greatly extended the new limits and threw two or three villages into one. Lands were given to all who would till them. For the first year no rent was required and for the second a to bra or horsebag full of grain for each bigha was all that was asked. Grant Duffs Marathas, 26, 27. See also Briggs' Ferishta, II. 349-50, King Mahmud Shah Bahmani (1378-1397) employed 10,000 bullocks at his private expense going to and from Malwa and Gujarat and bringing grain which was distributed to the people at a cheap rate. He also established seven orphan schools.]

1422

In 1422, no rain fell and famine raged throughout the Deccan multitudes of cattle died on the parched plains for want of water. King Ahmad Shah Vali Bahmani (1422-1435) increased the pay of his troops and opened public stores of grain for the poor. The next year also there was no rain. [Briggs' Ferishta, II. 405-6.]

1460

In 1460. [Except where special references are given the details of famines from 1400 to 1868 are taken from Lieut.-Col. Etheridge's Report on Famines in the Bombay Presidency (1868), 87-96.] In 1460 a failure of rain was followed by famine over the whole of Southern India. This famine is known as Damajipant's famine. Damaji was the

keeper of a large store of grain at Mangalvedha, twelve miles south of Pandharpur in Sholapur. He used much of the store in feeding Brahmans and was saved from punishment by the god Vithoba whom he worshipped. To save his worshipper Vithoba in the form of a Mhar went to the court at Bedar and paid the value of the missing grain.

1472-1473.

In 1472 and 1473 so severe a drought prevailed throughout the Deccan that the wells dried. No grain was sown for two years and in the third when there was rain scarely any farmers remained to till the lands. [Briggs' Ferishta, II. 493-4.]

1520.

1629-30.

1787.

1791-92

In 1520, the Deccan was so unsettled that no crops were grown and there was a famine. In 1629-30, no rain fell in the Deccan and famine and pestilence followed. [Grant Duff's Marathas, 46; and Elphinstone's History of India, 507.] The year 1787 is mentioned as marked by a failure of rain and by famine. The year 1791-92, though locally a year of plenty, was so terrible a year of famine in other parts of India that the rupee price of grain rose to twelve pounds (6 *shers*).

1792-1793.

In the next year, 1792-93, no rain fell till October, some people left the country and others died from want. The distress is said to have been very great. The Peshwa's government brought grain from the Nizam's country and distributed it at Poona. The rupee price of grain stood at eight pounds (4 *shers*) in Poona for four months and in the west of the district for twelve months.

1802.

In 1802 the prospect of a good harvest was destroyed by the ravages of Holkar's troops. From July to September his followers the Pendharis so utterly ruined the country that the rupee price of grain rose to two pounds (1 sher). The Peshwa's government encouraged the import of

grain and distributed it free of charge. Large quantities of grain were brought by Lamans and Charans. Still the distress was so severe that numbers fled to the Konkan and Gujarat, and thousands died of hunger and cholera. The sufferings were so great that mothers are said to have eaten their children. Even as late as 1838 the people of Bhimthadi remembered Holkar's famine with horror [Bom. Gov. Sel. CLI. 41, 254.].

1803.

In the following year, 1803, the raids of Sindia's and Holkar's troops again caused a great scarcity. The rupee price of grain rose to half a pound (¼ sher) and numbers died of starvation. Many left the country and the land lay waste. This famine affected the Poona district particularly. The river at Poona was covered with dead and rotting bodies. The Peshwa encouraged traders to import grain duty-free, granted remissions of revenue, and abolished land customs. The private charity of the rich did much to relieve the distress. A subscription of £4000 (Rs. 40,000), collected in Bombay under the patronage of Lady Mackintosh, was sent to Poona. Colonel Close, the Resident, who had already fed 15,000 people, arranged that each applicant for relief should receive 3d. (2 as.) to enable him to get a meal. About 5000 of the destitute were relieved in this way until the new crops were gathered. [Valentine's Travels, II. 123, 1.24.] At Poona the horses in General Wellesley's army were for some time fed on Bombay rice.

1819-1825.

In 1819-20, 1823, 1824, and 1825 Poona suffered greatly from cholera and from want of rain. So great was the panic that large numbers left their homes. For many months parts of the district were almost deserted. [Captain Chines' Itinerary, VI.]

1823-1825.

In 1823 the rupee price of grain in Poona was sixteen pounds (8 shers) and people died in the streets In 1824, a year remembered as the year of kharpad or distress, rain again-failed, especially in the country within 100 miles of Poona. The returns seem to show a slight fall of prices, the rupee price being twenty to twenty-four pounds (10-12 shers). Much bad grain was sold and sickness was so general that large numbers of people left the country. The loss of cattle was very severe. The distress continued till *Dasara* in October when a timely fall

of rain brought much relief. Government offered employment by opening works to improve the Karkamb and Bapdev passes.

1832-1838.

In 1832 failure of rain was followed by much distress. The rupee price of *jvari* rose from 120 to forty-six pounds and grain robberies were numerous. Orders forbidding grain-dealers unduly raising their prices are said to have done much to reduce the distress. 1833 was a year of scarcity in Indapur, 1835 was a bad season all over the district, and in 1838 Indapur again suffered from want of rain. [Bom. Gov. Rev. Rec. 772 of 1837, 30-31.]

1844-1846.

The next bad years were 1844-45 and 1845-46 when rain failed and there was much distress especially in the east. [Bom. Gov. Sel. CVII. 32.37, 70-71, and 118.]

1862-1867.

Between 1862 and 1867 there was a succession of years of very short rainfall. In the east of the district during the five years, ending 1866 the average fall was only seven inches. In 1864 the rupee price of bajri and jvari rose to about seventeen pounds ($8\frac{1}{2}$ shers). The landholders were well off and were not reduced to distress, and the demand for labour and the high wages paid on public works in the Deccan prevented the spread of distress among the labouring classes. Still from want of grazing cattle had to be sent away or sold. There was sufficient distress to make it advisable to open relief-works in Sirur, Bhimthadi, and Indapur. About £1876 (Rs. 18,760) were spent on repairing about seventy-five miles of road and digging the Patas reservoir and two wells in Supa. Grain compensation was granted to Government servants and in 1867 £8000 (Rs. 80,000) were remitted in Bhamthadi and Indapur and upwards of £6000 (Rs. 60,000) were held over till the next year.

1876-77.

The scanty and ill-timed rainfall of 1876, 20.76 compared with an average of about thirty inches led to failure of crops, which, joined to the bad crops in a small area in the previous year, spread distress amounting to famine over about half of the district. [The estimate was in area 2500 square miles of a total of 6647, and in population

318,000 out of 907,000. Within the affected area came the whole of the Indapur and Bhimthadi sub-divisions, twenty-three villages of Purandhar, six villages of Haveli, and thirty-three villages of Sirur, where the crops had entirely failed. In addition to these, twenty villages in Purandhar, twenty in Haveli, and thirty-three in Sirur were seriously affected. In the Khed, Junnar, and Maval sub-divisions outside of the famine area there was distress among labourers and travellers. The east and south-east suffered most. In three subdivisions, Haveli, Khed, and Junnar, the early crops seemed good; in Maval and parts of Sirur and Purandhar they were fair; in the rest of Sirur and Purandhar and in Bhimthadi and Indapur there was no outturn. Besides this failure of the early harvest, in September and October, only a few slight showers fell, and, except in a small area of watered land, no cold-weather crops were sown. Millet rose from fiftyone to nineteen pounds and Indian millet from sixty-five to 20½ pounds the rupee. These high prices and the want of field-work threw into distress large numbers of Mhars, Mangs, Ramoshis, and the poorer labouring Kunbis. The need for Government help began about the close of September. Government offered to transport people to waste lands in the Central Provinces, but no one took advantage of the offer. At the same time large numbers moved to the Gangthadi or Godavari valley. They found much distress in Gangthadi and as the usual markets for field labour were overstocked, some wandered across Berar to Sindia and Holkar's territories, others crowded into Bombay, and a few straggled to Gujarat. By the close of 1876 about 100,000 persons or 32.00 per cent of the affected population had left their homes. Most of the people who went belonged to the better class of Kunbis. To a great extent the movement was caused by the need of pasture. As a rule whole families went, but in many cases some member or members of a family were sent with the cattle. The villages whence fewest went were those near the Mutha canal works in the north-west of Bhimthadi, where whole villages flocked to the works. There was much distress, but grain prices were kept down by large importations, chiefly from the Central Provinces and to a less extent from Gujarat. The grain was brought to Poona by rail and thence distributed throughout the district. The municipality of Indapur purchased grain and sold it at something over cost price so as rot to interfere with local enterprise; so did the Jejuri municipality but only in the cod to re-sell at at a loss. It is probable that the early action of Government in finding paid labour for a large portion of the distressed population on the Mutha canal saved grain In the hot months of 1877 prices ruled high and distress increased. A good fall of rain in early June caused temporary relief. Many emigrants returned and sowing was actively pushed on . [More sickenss, suffering, and murtairty was

found among the returned emigrants than among those who had stayed at home and lived either on their own resources or on the relief offared by Government.]. But, except in Indapur, in July and August no rain fell, prices rose, distress grew heavier, and many were again forced to leave their homes. A good rainfall in September and October removed much anxiety and suffering, and cold-weather crops were sown over the greater part of Bhimthadi. At the close of November the demand for special Government help ceased. At the same time some of the early crops never recovered the long stretch of fair weather in July and August, and in Bhimthadi the cold-weather crops, which at first promised well, were afterwards much injured by disease. The result was renewed distress in the hot season of 1878, In the east of the district, at least one-fourth of the people lived on wild grains or grass seeds, and Government had again to provide labour for the poorer classes. Even then the famine was not over. In the rainy months of 1878 and again in those of 1879, direct relief was once more found necessary at Indapur, Baramati, and Dhankavdi near Poona. [In 1878, 77,068 people were relieved at a cost of £510 4s, (Rs. 5102); in 1879, 21 303 were relieved at a cost of £153 8s. (Rs. 1534).]

The following details show month by month the phases through which the distress passed and the measures which were taken to relieve it. In the first two or three days of September 1876 good rain fell in the west, in Junnar Khed and Maval, and greatly revived the withering crops. Rain again held off and the crops began to perish. About the close of September slight showers fell in a few places. The early crops seemed well in Maval; they were withering in Junnar, Khed, and Haveli, and had completely failed in Bhimthadi and Indapur where for want of fodder large numbers of cattle were dying. The price of grain was rapidly rising. As rain held off the ground could not be prepared for the cold-weather crop. Especially in Indapur and Bhimthadi the want of drinking water was beginning to be felt. Fears were entertained that the poorer classes would become disorderly, and, about the close of the month, relief works were opened in Bhimthadi and Indapur. Except that about the middle of the month a slight shower fell in Haveli, October passed without rain. Even in the west the early crops were withering and were being cut for forage, and in the wells water was failing. Except in a small area of watered land no cold-weather crops were sown. Over the whole district, especially in the east, the want of water caused distress, and cattle were offered for sale at nominal prices. In several places the people had begun to leave their homes. Extensive relief works were started, and, by the 22nd of October, including those on the Mutha canal, some 6000 people were employed. For charitable relief a sum of £2500 (Rs. 25,000) was set at

the Collector's disposal. As distress spread, besides additional assistants, the Collector was authorized to place on relief duty the mamlatdars of the most severely affected sub-divisions. November passed with only a few slight showers. The early crops continued to wither and the small area of late crops was dving for want of moisture. The distress was great, but large importations of grain kept down prices. In Poona the stock of grain was largo and, the market, was falling; in outlying towns prices were slightly rising. In the first half of the month bajri rose from 191/4 to nineteen pounds and jvari from twenty-two to 21½ pounds the rupee; about the close of the month they again fell to 201/7 and 201/8 pounds. In the east the wells were drying and water was scarce. The average daily number of people on the relief works rose from 6160 in the beginning to 28,455 at the close of the month. Of 20,654, the average daily number for the month, 14,253 were able-bodied, expected to do a full day's work and superintended by public works officers, and 6401 were aged or feeble expected to do two-thirds of a day's work and superintended by famine officers. [The original wages were, for a man 3d. (2 as.) a day, for a woman $2\frac{1}{2}$. ($1\frac{1}{2}$ as.), and for a boy or girl capable of work $1\frac{1}{2}d$. (1a.). About the middle of November, when prices rose over sixteen pounds the rupee, a sliding scale was introduced which provided that the money rate should vary with the price of grain and that a man should always receive the price of one pound of grain in addition to 1½d. (1 a.).

The new rates were: for a man the price of one pound of grain and $\frac{3}{4}$ d. ($\frac{1}{2}$ a.) instead of $\frac{1}{2}$ d. ($\frac{1}{2}$ a.); for a woman the prices of one pound of grain and $\frac{3}{8}$. ($\frac{1}{4}$ a.) instead of $\frac{3}{4}$ d.($\frac{1}{2}$ a.) and for a boy or girl the price of half a pound of grain and $\frac{3}{8}$ d. $\frac{1}{4}$ a.]

December passed without rain. Crop prospects remained unchanged, people and cattle continued to move west. During the month the importation of grain was large and *bajri* fell from twenty pounds in the beginning to twenty-three pounds about the close of the month, and *jvari* from 18¼ pounds to twenty-two pounds. The numbers on public works rose from 14,253 to 23,498 and on civil works from 6401 to 16,752. The total sum spent on charitable relief up to the close of the year was about £200 2s. (Rs. 2011).

January passed without rain. Grain kept pouring into the district, and bajri fell from twenty-three pounds to 23½ and jvari from twenty-two to 25¼ pounds. The numbers on public works rose from 23,498 to 23,764, and on civil works from 16,752 to 29,569. As the civil works seemed too popular, on the 19th of January Government reduced the

rates of pay, and issued orders to enforce task and distance tests. This caused afresh emigration and a considerable fall in the numbers on the works. At the same time charitable relief was started and by the end of the month distributed to 1694 persons.

About the middle of February sixteen cents of rain fell at Poona. Grain continued to come in large quantities, bajri rose slightly to twentythree pounds and *jvari* to twenty-four pounds. The numbers on public worth fell from 23,764 to 23,034, and on civil works from 29,569 to 18,752. This decrease was chiefly due to the lowering of pay on the civil works, the transfer of the able-bodied from civil to public works, and the enforcement of task and distance tests. The number on charitable relief rose to 1766. During the month there was slight cholera in Bhimthadi and Purandhar. In the beginning of March about twenty-six cents of rain fell. Grain continued to pour in and the supply was plentiful. Except in the beginning of the month, when there was a small rise, prices remained at twenty-three pounds the rupee for bajri and twenty-four pounds for *jvari*. There was slight cholera in Bhimthadi and three other sub-divisions. The numbers on civil works continued to fall, from about 12,213 in the beginning of the month to 4876 about the close; public works showed a small rise from 23,034 to 26,603, and charitable relief from 1766 to 2290. About the middle of April eighty cents of rain fell at Indapur. Grain was largely imported and the supply continued plentiful, with bajri slightly dearer at 213/4 pounds and *jvari* at 20³/₄ pounds. There were a few cases of cholera, and cattle-disease was prevalent in Sirur and Haveli. The numbers relieved rose on public works from 26,603 to 81,678, and on charitable relief from 2290 to 4301; on civil works the numbers fell from 4876 to 4650. The first days of May brought slight showers in Purandhar, and about the close of the month good rain fell all over the district except in Junnar, Khed, and Maval. Small numbers were coming back. The grain supply continued ample, but bajri rose to 19% pounds the rupee and *ivari* to 19³/₄ pounds. The high prices caused much distress. During the month there was slight cholera over most of the district. The numbers relieved rose on public works from 31,678 to 40,177, and on charitable relief from 4301 to 7501; on civil works they fell from 4650 to 4612. In June an average of 6.78 inches of rain fell. Many landholders came back bringing their cattle. The sowing of the early crops was begun in the west; in the east sowing was much kept back from want of bullocks. Cattle-disease was prevalent in three subdivisions and a few cases of cholera occurred. The supply of grain was sufficient and both bairi and ivari continued steady at 19½ pounds the rupee. The numbers on public works fell from 40,177 to 35,344; they rose on civil works from 4612 to 4625, and on charitable relief from

7501 to 12,729. July passed with little rain, at average fall of only 3.24 inches, and this almost solely in the west. Except in Maval rain was everywhere wanted, the crops especially in Bhimthadi and the east were withering, and in many places field work was at a stand. The supply of grain was sufficient, but bajri rose to 14% pounds and jvari to 14¼ pounds. This caused much distress and in the south and east many were again preparing to start for the Bears. The numbers on public works fell from 35,344 to 26,786, on civil works from 4625 to 3552, and on charitable relief from 12,729 to 12,420. In August an average of four inches of rain fell, but it was chiefly confined to the west. Rain was wanted everywhere, particularly in Indapur, Bhimthadi, Sirur, and Purandhar. The rice crops in Maval were good, but in the east the crops were withering and in some places they had perished. In Bhimthadi and Purandhar, with some exceptions, the pulse was lost. The high prices, bajri at 12% and jvari at thirteen pounds, caused much distress. Many Bhimthadi landholders were preparing to leave their homes. Throughout the month cholera was prevalent. The numbers on relief works fell, on public works from 26,786 to 24,514, and on civil works from 3557 to 2003; on charitable relief they rose from 12,420 to 21,650. In September an average of 5.42 inches of rain fell. At first in the central sub-divisions, Junnar Khed and Haveli, there were only slight showers, but, about the close of the month, there was good rain, and the early crops, which except in Indapur had suffered severely, were much benefited. About the middle of the month the late or *rabi* sowing was begun, the poorer landholders in Bhimthadi finding great difficulty in obtaining seed and cattle. *Bajri* fell from 12¾ to 14% pounds and jvari from thirteen to 15% pounds. The people were improving, and cholera and small-pox were on the decline. The numbers on public works rose from 24,514 to 24,687 sad on charitable relief from 21,650 to 24,474; on civil works the numbers fell from 2003 to 719. In October an average of 3.38 inches of rain fell. The prospects of the early crops continued favourable and the late sowing was in progress. The Bhimthadi cultivators' seed and cattle difficulty disappeared. The moneylenders came forward; the better class of Kunbis had generally stocks of their own; and a large proportion of Bhimthadi, chiefly along the Bhima, was tilled by the people of the west of the district and of Satara, who advanced seed and lent bullocks on the crop-share or batai system. [In 1876-77 the tilled area in Bhimthadi was 101,730 acres; in 1877-78, 372,088 and in 1878-79, 335,319 acres. In Indapur for the same years the areas were 9400 186,769, and 192,360 acres. About the end of the month the sowing in Bhimthadi was greatly kept back by heavy showers. Bairi fell from 14% to 18% pounds, and jvari from 15% to nineteen pounds. The numbers on public works fell from 24,687 to 15,461, on civil

works from 719 to 122, and on charitable relief from 24,474 to 8209. The large decrease in the number on the relief works was mainly caused by people having loft the works tempted by the better wages they could earn in the fields. Slight rain fell about the close of November. The *bairi* harvest was in progress and the late sowings were finished. In four sub-divisions the *jvari* crops were slightly damaged by blight. In some parts, owing to the want, of bullocks, the tillage had been slovenly, and in many places the *jvari* crops were choked with weeds. On the whole the outlook was promising. Bajri fell to twenty-two pounds and *jvari* to 23½ pounds. The numbers on public works fell from 9621 in the first days of the month to 1788 about the close, on civil works from 122 to fifty-three, and on charitable relief from 8209 to 1550. At the end of November all relief works were closed. December passed with a few slight showers. Bajri fell to 23¼ pounds and *ivari* to twenty-five pounds. Government continued to offer charitable relief, but on the 22nd of the month the number seeking relief had dwindled to 180.

The following statement of average monthly millet prices and numbers receiving relief, shows that, during the first guarter of 1877, grain kept pretty steady at twenty-three pounds the rupee or more than twice the ordinary rate, that its price rose rapidly till it reached 12% pounds in August, and that it then quickly fell to 23½ pounds. As early as December 1876 the numbers on relief works reached 40,250, and in January 1877 rose to 53,333. In February, by lowering wages and enforcing task and distance tests, the total was reduced to 41,786, and in March it fell to 33,223. From that it rose to 44,789 in May, and then began gradually to fall. From June to September the decrease was slow, it was rapid in October, and in November the works were closed. The numbers on charitable relief rose steadily from 1694 in January to 12,729 in June; then with a slight fall to 12,420 in July they rose to 24,474 in September, In October they rapidly declined to 8209, in November to 1550 and in December to 180 when almost all the relief-houses were closed:

POONA FAMINE, 1876-77.

| MONTH. | Α | AVERAGE | | | | | |
|--------|----------------|------------|----------|--------|---------|--|-------|
| | Civil. Public. | On Relief. | | | PRICES. | | RAIN. |
| | | Total. | Charity. | Bajri. | Jvari. | | |

| 1876. | | | | | Pounds. | Pounds. | Inches. |
|-----------|--------|---------|-----------|---------|---------|---------|---------|
| November | 6401 | 14,253 | 20,654 | | 19 | 201/2 | Slight. |
| December | 16,752 | 23,498 | 40,250 | | 20¾ | 19¾ | |
| 1877. | | | | | | | |
| January | 29,569 | 23,764 | 53,333 | 1694 | 231/8 | 22¾ | |
| February | 18,752 | 23,034 | 41,786 | 1766 | 23 | 24 | .02 |
| March | 6620 | 26,603 | 33,223 | 2290 | 224/5 | 233/5 | .26 |
| April | 4650 | 31,678 | 36,328 | 4301 | 211/4 | 211/4 | .10 |
| May | 4612 | 40,177 | 44,789 | 7501 | 19¾ | 19¾ | .89 |
| June | 462 | 35,344 | 39,969 | 12,729 | 191/2 | 191/2 | 6.48 |
| July | 3567 | 26,786 | 30,343 | 12,420 | 143/8 | 141⁄4 | 3.24 |
| August | 2003 | 24,514 | 26,517 | 21,650 | 12¾ | 13 | 4.00 |
| September | 719 | 24,687 | 24,406 | 24,474 | 14% | 15 % | 5.42 |
| October | 122 | 15,461 | 15,583 | 8209 | 18 % | 19 | 3.32 |
| November | 53 | 4738 | 4791 | 1550 | 22 | 231/2 | .30 |
| December | | | | 180 | 232/3 | 25 | |
| Total | 98,435 | 314,537 | 412,972 | 98,764 | | | 20.03 |
| Average | 7572 | 24,195 | 31,767 | 8230 | | | |
| Total Rs. | | | 1,375,966 | 230,149 | | | |
| | | | 1,606,115 | | | | |

Within the famine area carts could hardly be hired. When they took fodder and grain to the relief works from other parts of the district, the charges were seldom higher than the ordinary rates. Except in December 1876, when a cart cost 2s. 6d. (Rs. $1\frac{1}{4}$) and in January 1877, when it cost 3s. (Rs, $1\frac{1}{2}$) a day, the daily rate for a cart was 2s. 9d. (Rs. $1\frac{3}{8}$).

A special census, taken on the 19th of May 1877, when famine pressure was general and severe, showed that of 48,051 workers, 42,304 on public and 5747 on civil works, 30,030 belonged to the subdivisions where the works were carried on, 11,011 belonged to other sub-divisions of the district, 4701 were from other districts, and 1649 were from neighbouring states. As regards their occupation, 2096

were manufacturers or craftsmen, 24,285 were holders or underholders of land, and 21,070 were labourers.

In 1877 relief-houses were opened for the infirm poor. Thirty-three houses were opened and maintained at a cost of £22,838 (Rs. 2,28,380). Of twelve houses with a cost of £6949 (Rs. 69,490) in Bhimthadi, two at Baramati and Pandare were opened in April; three at Supa, Patas, and Jalgaon-Kharepathar, in May; one at Pimpalgaon, in June; four, at Pargaon, Khadki, Boribyal, and Shirsuphal, in July; and one at Yevat, in August. Of eleven in Indapur at a cost of £9551 (Rs. 95,510), eight, at Indapur, Kalas, Nimbgaon-Ketki, Varkute-Budruk, Madanvadi, Lasurne, Shetphal-Haveli, and Palasdev, were opened in July; two, at Bavda and Hingangaon, in August; and one at Akola, in September. Of seven, with a cost of £2865 (Rs. 28,650) in Sirur, there was one each at Ghodnadi, Ranjangaon-Ganpati, Talegaon, Nirvi, Mandavgaon, Karde, and Alegaon. Of two, with a cost of £2212 (Rs. 22,120), in Haveli, one was at Dhankavdi and the other at Loni-Kalbhar. One with a cost of £1260 (Rs. 12,600) was opened at Jejuri in Purandhar Except at Patas in Bhimthadi, which had to be kept open till the 28th of February 1878, all the relief-houses were closed on the 80th of November 1877. As a rule the death rate in the Poona relief camps was low. It was highest in the relief camp at Dhankavdi close to Poona. Except at Dhankavdi no camps were built, the villages were almost deserted and the people were able to house themselves and to live in rest-houses. At Supa and Jejuri large empty houses were rented and a few cheap sheds were built. The relief-house at Dhankavdi was reopened for a few weeks in July 1878 when the rains held off.

The most marked features of the famine in Poona were the efforts of the landholders to help themselves, and the steady flow of grain into the markets, so that, from about the end of October 1876 to the close of the famine in October 1877, no great difficulty was found in keeping the labourers supplied with grain at rates very slightly in excess of Poona rates. As soon as signs of scarcity began the Kunbis left their houses in large numbers to find fodder for their cattle and food for themselves. In contrast to the Kunbis, the Mhars Mangs and Ramoshis, from indolence and perhaps from the fear that if they left their villages they might forfeit their hereditary rights, would not leave their villages to go to the relief works. At first they were disinclined to take direct relief, and clamoured for employment in their own villages. Later they became demoralized, and many capable of work swelled the numbers on charitable relief. It was customary to send large drafts to the public works, feeding them at certain villages on the way. The low-

caste labourers sent distances or forty to fifty miles started willingly, but after getting refreshed at the staging villages dispersed and made their way back to their homes.

Early in the famine, Bhimthadi, Purandhar, and Haveli were placed under the famine charge of Mr. A. Keyser, first assistant collector; Indapur was placed under Mr. W. M. Fletcher, of the revenue survey, who had sole charge of all relief operations in that sub-division, and subsequently of twenty-nine villages in the east of Bhimthadi; and Sirur, Khed, Junnar, and Maval were under Mr. E. C. Ozanne, assistant collector, of the first of which he had also the revenue charge. Mr. Keyser was assisted by Mr. H. L. Holland of the revenue survey, who was however sick and on privilege leave from November 1876 to March 1877 and again permanently invalided in July when he went home on sick leave, and also from February 1877 by Mr. W. P. Symonds, assistant collector, who, from its establishment in August 1877, was placed in charge of the Dhankavdi relief camp, until October when he relieved Mr. Ozanne. Besides these officers, Mr. A. L. P. Larken, assistant collector, was entrusted with the organization of the Mutha canal and Nira canal labour gangs and with settling land compensation cases. In October 1876 the mamlatdars of Indapur and Bhimthadi, and in November and December, those of Sirur and Purandhar were put on famine relief duty; and in August 1877, the mamlatdar of Maval was placed under Mr. Symonds on the Dhankavdi relief camp. The mamlatdar of Indapur was Ray Saheb Vishnu Vasudev, of Bhimthadi Rav Saheb Ganesh Bhivrav, of Sirur Khan Saheb Shamsudin Alikhan, of Purandhar Rav Saheb Sitaram Dadaji, and of Maval Rav Saheb Mahadev Pundlik.]

In 1877 the famine area was divided into thirty-seven relief circles, each under an inspector. Twelve of these, Pimpalgaon, Yevat, Pargaon, Patas, Supa, Murti, Pandare, Jalgaon-Kharepathar, Baramati, Ravangaon, Shirsuphal, and Malad, [The last three, each of nine villages, were under Mr. Fletcher.] of seven to fifteen villages, were in Bhimthadi; ten, Bavda, Vadapuri, Nimbgaon- Ketki, Lasurna, Kalas, Bhigvan, Palasdev, Kalthan, Agoti, and Hingangaon, [Indapur is omitted as it was managed by the municipality.] of seven to ten villages, were in Indapur; eight, Mandavgaon, Nirvi, Karda, Kondhpuri, Malthan, Sirur, Pabal, and Shikrapur, of five to eleven" villages, were in Sirur; four, Rajuri, Jejuri, Valha, and Guroli, of nine to thirteen villages were in Purandhar; two, Loni-Kalbhar of eleven and Ashtapur, of ten villages, were in Haveli; and one, Lakhangaon of seven villages, was in Khed.

The difficulties in the way of effective relief were lightened by the tractable, and, in the case of the cultivators, the self-helpful character of the people. At first the village officers were directed to feed travellers in obvious need of food. In consequence of this order men wandered from village to village living as destitute travellers, so that it became necessary to modify the orders and limit the number of villages where travellers might be relieved to a few on the main thoroughfares. These adult malingerers kept in fair condition, but their children were often painfully reduced. The wanderers were not confined to the low castes. Numbers flocked into Poona, where a private association dealt somewhat indiscriminate charity, and streamed towards Bombay from Poona, Satara, and Sholapur. In August all beggars were turned out of Poona, a relief camp was established at the village of Dhankavdi about three miles to the south of the city, organized private charity was stopped, and those in need of relief were taken to the camp, whence when fit for work they were drafted to relief works or sent to their own homes. People were also collected in Bombay and Thana and sent by rail to the camp near Poona at Government expense. Another difficulty was, that, before the task or any other test was established, people rushed to the relief works in such numbers that it was difficult to deal with them, except at a great waste of public money. Works under civil agency had often no supervising establishment beyond one or more inexperienced and temporarily employed clerks. In some cases there were as many as 1500 to 2000 workers, and in one case for a short time more than 4000 workers on one civil agency work. The result was a pretence of work, insufficient return for large expenditure, and, very probably, some amount of fraudulent gains on the part of the clerks. With the establishment of the distance and task tests and the opening of the Nira canal, the Dhond-Manmad railway embankment, and other large and well organized works under the Public Works Department, these difficulties disappeared and the civil agency works were entirely set apart for such persons as were incapable of hard work. The difficulty then was to find work which the weakly could do and to provide for the enormous preponderance of women. It was necessary to employ a few able-bodied men on civil agency works, while almost the only suitable employment that could be found was clearing silt from old ponds, and throwing gravel on roads and clearing stones from them. Next it was found difficult to enforce the tests without causing serious suffering and loss of life. The unwillingness of the low-caste people to leave their homes has been noticed. There was a natural unwillingness, on the part of all classes, to tramp long distances with their women and children, and work without much shelter at night or provision for the first few days, while in the case of those unaccustomed to continuous

work there was sheer inability to perform even the moderate task required. Poona was singularly favoured in having many large and well-organized works in progress, and in almost all cases the difficulties were successfully overcome by a judicious system of advances, watchfulness on the part of the officers in charge of the words, the system of credit with the grain-dealer which soon sprang up, and the wearing off of the feeling of srangeness in the lives of a population, who, if not well-to-do, had no former experience of the actual pinch of hunger. The total cost of the famine was estimated at £160,611 (Rs. 16,06,110), of which £137,596 (Rs. 13,75,960) were spent on public and civil works, and £23,015 (Rs. 2,30,150) on charitable relief.

Except that the rice crops suffered from petty thefts in the harvest of 1877, and that small stores of grain were taken out of deserted houses, there was a striking freedom from crime. Compared with the former year the criminal returns showed a total increase of 1527 offences, which in the commissioner's opinion, were due to the famine, being chiefly thefts and other offences against property and person. [The chief details are, an increase under murders of 3; under attempt or abetment of suicide, 6; under robbery, 16; under lurking housetrespass or house-breaking, 154; under mischief, 31; under theft of cattle, 183; under ordinary theft, 1251; and under receiving stolen property, 95.1 There are no statistics of the numbers either of the men or of the cattle who left the district and did not come back. It is believed that fully a fourth of the emigrant population never returned, and about four-fifths of the cattle taken away were never brought back. Among the people the estimated special mortality was about 8300 souls, but compared with 1872 the 1881 census shows a fall of 20,732. The addition of the normal yearly increase of one per cent during the remaining seven years gives 85,223 as the loss of population caused by death and migration in 1876 and 1877. Of cattle, besides those that died, many thousands were sold at very low prices. [The decrease of cattle through deaths and other causes arising from famine has been estimated at near 110,000.] Though very great, the loss of stock did not interfere with field work. The tilled area in 1877-78 fell short of the 1875-76 area by 7476 acres. Of a land revenue of £116,004 (Rs.11,60,040), for collection in 1876-77, £70,321 6s. (Rs.7,03,213) were recovered by the close of the year. In 1877-78, of a land revenue of £117,013 (Rs 11,70,130) £110,147 14s. (Rs. 11,01,477) were recovered. Of £114,894 18s. (Rs.11,48,949), the realizable land revenue of 1878-79, £104-030 10s. (Rs.10,40,305), and of the balances, £12,091 2s. (Rs.1,20,911) were recovered. By the 1st of January 1880 the outstanding balance rose to £46,488 of which in

June 1880 about £42,981 (Rs. 4,29,810) were remtted. in the east of the district some villages were deserted and others were half empty. The cultivation was far below the average and the number of cattle enormously decreased. With ordinary harvests it seemed probable that at least ten years would be required to restore the country to its former prosperity.

1878-79

In 1878-79, in Sirur, Purandhar, Bhimthadi and Indapur the kharif or early crops were almost entirely destroyed by too much wet. In Indapur they were also choked by an extraordinary growth of weed. Half crops were obtained in Sirur and in parts of Purandhar and Bhimthadi, but in places considerable damage was done by locusts and other insects. The rabi or late crops promised well till as they began to ripen the rats committed fearful havoc.

The price of grain continued exceedingly high and at the beginning of the hot weather the poorer classes of Indapur showed signs of suffering. To relieve the distress at various places in Indapur work was opened on the Nira Canal. Piece-work was exacted from the ablebodied, and the weak and sickly received subsistence wages. During May, June, and July, nearly 10,000 people were daily employed. Between 200 or 300 who were unfit for work, were cared for in a relief-house in Indapur. The total cost was £663 12s. (Rs. 6036).

CAPITAL

CAPITALISTS.

IN 1872, according to the census, besides well-to-do husbandmen and professional men, 12,028 persons held positions implying the possession of capital. Of these 1464 were bankers, moneychangers, and shopkeepers; 7608 were merchants and traders; and 2956 drew their incomes front rents of houses and shops, from funded property, shares, annuities, and the like. Under the head of capitalists and traders, the 1880-81 license tax assessment papers show 2460 persons assessed on yearly incomes of more than £50 (Rs. 500). Of these 1229 had £50 to £75 (Rs. 500-750); 429 £75 to £100 (Rs. 750-1000); 304 £100 to £125 (Rs. 1000-1250); 119 £125 to £150(Rs. 1250-1500); 136 £150 to £200 (Rs. 1500-2000); 105 £200 to £300 (Rs. 2000-3000); sixty £300 to £400 (Rs. 3000 - 4000); twenty-seven £400 to £500 (Rs. 4000 - 5000); twenty-four £500 to £750 (Rs. 5000-

7500); thirteen £750 to £1000 (Rs. 7500-10,000); and fourteen over £1000 (Rs. 10,000). Besides these the 1879 papers showed 12,976 persons assessed on yearly incomes of £10 to £50 (Rs. 100-500). Of these 6402 had £10 to £15 (Rs. 100-150); 3673 £15 to £25 (Rs. 150-250); 1923 £25 to £35 (Rs. 250-350); and 978 £35 to £50 (Rs. 350-500). [The 1879 figures are given because incomes under £50 (Rs. 500) have since been freed from the license tax.]

From 1750 to 1817 Poona was the capital of the Peshwas and the resort of the great officers and feudatories of the state with their numerous followers. During this time Poona was probably the richest city in Western India. In 1798 the exactions of the last Peshwa Bajirav II. and, in 1802, of Yashvantrav Holkar stripped the people of Poona of much of their wealth. Still in 1817, when it passed under British rule, Poona was a rich city where skilled craftsmen centered and large sums were spent. The capitalists of Poona suffered considerably by the change from Maratha to British rule. About one-third of the capital was driven from the market. Poona ceased to be the seat of government and the residence of its numerous ministers and officers. The great purchases of jewels, shawls, embroidered cloths, and other valuable articles came to an end and trade declined. Under the Peshwas much of the revenue from their widespread possessions centered in Poona. The money came either by bills drawn from the districts upon the Poona banks, or if it was paid in cash it passed through the hands of bankers, who profited by the exchange of coins before the collection reached the public treasury. Poona bankers had their agents in the districts and the ramification of the money trade in loans to the people and to the renters of villages created a wide circulation of specie, which returned to the coffers of the Poona bankers with an abundant accumulation of interest. Loans of this nature were usually repaid in grain which was received at a price much below the market rate, and thus brought great returns to the lenders. Under the British revenue system all these advantages to the capitalists disappeared. The trade in moneylending was still further hindered by the substitution of suits in courts instead of the former private methods of dunning debtors. The merchants were forced to be more cautious in their speculations and to look more to individual character and collateral security. [Deccan Riots Commission Report, Ap. C, 270, 271.] A few bankers failed from bad debts contracted by broken-down nobles and officials. About 1821 business was very dull in Poona. Many rich bankers had fallen into poverty. [Captain H. D. Robertson, Collector (1821), East India Papers, IV. 588, 589, 593 Before 1850 the period of Poona's greatest depression had passed, It remained the residence of many of the pensioned Maratha nobles and the head-quarters of the district of

Poona and a very large military station. About 1835 it became the resort of the Governor and Council of Bombay between June and October and the head-quarters of the Bombay army for part of the year. Since the opening of the southern branch of the Peninsula railway in 1858, Poona has continued to increase in size, trade, and wealth. At present (1883) in the city and cantonment of Poona, besides the branch of the Bombay Bank, forty to fifty firms have a capital of £10,000 (Rs. 1,00,000) and upwards, about eighty firms have £5000 to £10,000 (Rs. 50,000-1,00,000), and about 250 have £1000 to £5000 (Rs. 10,000 - 50,000). In Junnar, the place of next importance, the seat of Musalman governors in the times of the Bahmanis (1347-1489) and of the Moghals (1637-1760), one firm has a capital of about £10,000 (Rs. 1,00,000), about five have £5000 to £10,000 (Rs. 50,000-1,00,000) and about forty have £1000 to £5000 (Rs. 10,000-50,000). In the rest of the district, in Baramati Indapur Sasvad and Sirur, about seven firms have a capital of about £10,000 (Rs. 1,00,000), about seven have £5000 to £10,000 (Rs. 50,000-1,00,000), and 200 to 800 have £1000 to £5000 (Rs.10,000-50,000). A large proportion of these firms lend money on mortgage and do not trade. The man of capital are chiefly Gujarat, Marwar, and Lingayat Vanis, and local Brahmans. A few Chambhars, Kunbis, Malis, Marathas, Mhars Sonars, and Telis with small capital are scattered over the district, and in the city and cantonment of Poona are several rich Europesn, Jew, Musalman, and Parsi firms.

[Ray Saheb Narso Ramchandra, Secretary Poona Municipality.] Gujarat Vanis, of whom there is a large colony at Supa in Bhimthadi, are said to have come to the Deccan about 250 years ago when Surat was the chief centre of trade in Western India (1608-1658). They appeared as travelling dealers in foreign spices and groceries, visiting the Deccan in the fair season. After a time they settled as grocers in different parts of the district, and taking to moneylending soon grew rich. They are still considered foreigners, and except in dress keep all Gujarat customs and manners, and visit their native country every three or four years to perform marriage and other ceremonies. They have increased under are British, though of late years their number has been stationary. Except a few rich traders and bankers in the city of Poona, most Gujarat Vanis are petty shopkeepers, traders, and moneylenders. The Marwar Vanis came later than the Gujaratis, but were settled in the district in large numbers before the beginning of British rule. They were looked on with disc favour by the Marathas as aliens who took hoards of money to their native country, and as Jain heretics their temples were often turned to the use of Brahmanic or local gods. [Deccan Riots Commission Report, 23.] Many have settled

in the district within the last forty years. [The head-quarters of Bombay Deccan Marwaris is the town of Vambori the Rahuri subdivision of Ahmadnagar, about fifteen miles north of Ahmadnagar city. It is the seat of a large Marwari community and is the centre of their exchange and banking business. The proportion of Marwaris in Poona is not so large as in Ahmadnagar, where in some places they have almost a monopoly of moneylending. Deccan Riots Commission Report, 23.] In Poona as in Nasik and other parts of the Presidency the great reductions in rent that were made between 1837 and 1850 left the landholder with a margin, of which before long the Marwari gained the chief share. They usually begin business as clerks and servants of established shopkeepers and lenders. While working as clerks, generally by buying old gold lace and embroidered clothing or broken glass bangles and by saving, they put together a little capital. When the clerk has gathered enough capital, he severs his connection with his master and starts as a shopkeeper and moneylender. In this way new shops are being continually opened. Rich and long-established Marwari firms are careful to do nothing to injure their good name. On the other hand, as a class, the small Marwaris are unscrupulous as to the means they use for making money. Still though harsh and unscrupulous to his debtors, even the petty and pushing lender and shopkeeper as a rule deals straightly with his own people and with other traders. The Marwari lender's chief characteristics are love of gain and carelessness of local opinion. He has much self-reliance and great industry. He has usually education enough to understand the law and procedure of the courts to which he often resorts. He is an excellent accountant and is generally quick witted in, all that concerns his business. Knowing that the people look on him as a stranger and a hardhearted usurer he holds aloof from them and has no sympathies with them. He burdens himself with as few permanent investments as possible, and like the Gujarat Vani goes to his native country for marriage and other ceremonies. Besides as a moneylender and general broker he is employed as a retail and wholesale dealer in groceries, grain, and cloth. Lingayat or Karnatak Vanis are chiefly ironmongers and grocers and are seldom moneylenders. Brahman capitalists who belong to the district are mostly Konkanasth Brahmans in towns and Deshasth Brahmans in villages. Except a few in the city of Poona, who are printers, booksellers, and publishers of newspapers, the town Brahmans who engage in trade are bankers and moneylenders, and the village Brahmans who engage in money lending belong to the village accountants' or kulkarnis' families. Kunbis and other smaller capitalists work in the fields and at their crafts besides engaging in moneylending. Parsi and Musalman capitalists are contractors,

landholders, and traders, and the few Europeans are agents of Bombay firms trading in Poona, or are independent traders.

SAVING CLASSES.

Of townspeople, merchants, traders, shopkeepers, brokers, pleaders, doctors, contractors, and highly paid Government servants; and of country people, landlords, petty shopkeepers, and moneylenders, and a few rich cultivators save money. Traders spend much of their savings in adding to their business. With all classes of natives, except Marwar and Gujarat Vanis, the favourite investment is ornaments and jewelry. Next to ornaments come land and house property and lending money on mortgage. Government savings banks and Government securities are resorted to by the higher classes of townspeople who cannot make a better use of their money and by others as a safeguard against loss and because they can take out the money whenever they want it. Formerly considerable sums were invested in private native banks, chiefly by friendless widows and others, who got six per cent interest. But savings banks and Government securities, though they pay only 3\%, 4, and 4 \% per cent, have greatly reduced this form of investment. Joint stock companies are not popular except with those who have business connection with Bombay. European Government officers have generally accounts with the Poona branch of the Bombay Bank or with Bombay firms. The twelve years ending 1882 show a considerable though not a constant increase in the advantage taken of the two forms of investment provided by Government savings banks and Government securities. In 1870-71 the deposits in the savings banks at Poona and other sub-divisional towns amounted to £12,278 (Rs. 1,22,780). They rose to £38,544 (Rs. 3,85,440) in 1873-74, fell to £22,352 (Rs. 2,23,520) in 1874-75 and remained with little change till they rose to £37,268 (Rs. 3,72,680) in 1879-80 and to £65,055 (Rs. 6,50,550) in 1880-81. This great increase was owing to the rise in the highest amount of a single deposit from £150 to £500 (Rs. 1500-5000). In 1881-82 as the amount of greatest deposit was again lowered to £150 (Rs. 1500), the deposits fell to £38,321 (Rs. 3,83,210); they rose to £41,468 (Rs. 4,14,680) in 1882-83. New savings banks have also been recently opened in connection with post offices. The depositors are Hindu traders, Government servants, and landholders. During the thirteen years ending 1882-83 the interest paid on Government securities has risen from £5755 (Rs.57,550) in 1870-71 to £7512 (Rs. 75,120)in 1882-83. The increase, though considerable, has been far from steady. The amount dropped from £5755 (Rs. 57,550) in 1870-71 to £4131 (Rs. 41,310) in 1872-73, and from that rose steadily to £9116 (Rs. 91,160) in 1878-79. It fell to

£6898 (Rs. 68,980) in 1879-80, rose to £8805 (Rs. 88050) in 1880-81, and again fell to £7156 (Rs. 71,560) in 1881-82 and £7512 (Rs. 75,120) in 1882-83. The details are:

Poona Savings Banks and Government Securities, 1870-1882

| YEAR. | Savings Banks Deposits | Government Securities Interest. | YEAR. | Savings Banks. Deposits | Government Securities interest. |
|-------------|------------------------------|---------------------------------------|---------|-------------------------------|---------------------------------------|
| | £. | £. | | £. | £. |
| 1870- 71 | 12,278 | 5755 | 1877-78 | 22,305 | 7179 |
| 1871- 72 | 20,353 | 5820 | 1878-79 | 22,697 | 9116 |
| 1872- 73 | 21,820 | 4131 | 1879-80 | 37,268 | 6898 |
| 1873- 74 | 38,544 | 5830 | 1880-81 | 65,055 | 8805 |
| 1874- 75 | 22,352 | 6099 | 1881-82 | 38,321 | 7156 |
| 1875- 76 | 23 847 | 6427 | 1882-83 | 41,468 | 7512 |
| 1876- 77 | 26,194 | 6688 | | | |

BRANCH BOMBAY BANK.

A branch of the old Bank of Bombay was opened in Poona early in 1862. During the speculations which accompanied the American War it carried on a large business in local advances and in the purchase of bills on Bombay. With the close of the war business collapsed and in 1868 the old Bank of Bombay was placed in liquidation. The Poona Branch was taken over by the new Bank of Bombay and shortly after the Government local treasury was made over to its care. Deposits are held by the Bank to a moderate extent; but there is little or no profitable employment for its funds in Poona, as the requirements of local traders are for the most part supplied by local native moneylenders, who afford facilities against which the Bank cannot

compete. The branch has been of much use to Government in financing for the heavy requirements of the local Treasury, as well as to the European residents who use the branch freely for all purposes of ordinary banking.

BANKERS.

[Ray Saheb Narso Ramchandra, Secretary Poona Municipality.] No native firms confine themselves to banking; all are also moneylenders and traders. The chief bankers are found in Poona and are generally Gujarat and Marwar Vanis and local Brahmans. Some Poona bankers have dealings with Bombay; with Ahmadabad, Baroda, Broach, and Surat in Gujarat; with Ajmir, Jaypur, and Udepur in Rajputana; with Karachi and Haidarabad in Sind; with Dhar, Gwalior, and Indur in Central India; with Akola, Nagpur, and Umravati in Berar; with Agra, Allahabad, Benares, Calcutta, Delhi, Kanpur, and Lucknow in Northern and Eastern India; with Aurangabad and Haidarabad in the Nizam's country; with Belgaum, Dharwar, and Karwar in South Bombay, and with Bellari in Madras; and the main towns along the highway leading to the shrine of Rameshvar in South India. Where there is no agency a bill or hundi is given on a banker in the nearest large town and is cashed by the bankers of the smaller places in the neighbourhood. Local payments are made in silver and beyond district limits in bills of exchange or hundis. The rates of commission for a hundi range from a quarter to four per cent, being high during the busy season October to May. When the firm issuing the bill has a large balance at the agency, as they tend to adjust accounts without the cost of sending bullion, bills are issued at par. Under ordinary circum stances the highest sum for which a bill can be cashed in Poona without notice may be taken at £400 (Rs.4000) and after notice at £2500 (Rs. 25,000), and in the other banking towns at about £100 (Rs. 1000).

Bills.

[Steele's Hindu Laws and Customs in the Deccan.] The two most usual forms of exchange bills or *hundis* are bills payable at sight called *darshani* and bills payable after an interval generally of less than nine days called *mudati*. Bills are of three kinds, personal or *dhanijog* when the grantee is the person to whom or to whose order the payment is to be made; on trust or *shahajog* when payment is made to a nominee of the grantee known to the payer; and descriptive or *nishajog* where a description of the payee is embodied in the bill. It is not usual to draw bills in sets. A letter of advice to the agent or banker, stating the amount drawn, the number of the bill, and the name of the person to

whom or in whose favour the bill has been granted, is considered enough. Bills before they reach the correspondent of the drawer are in some cases several times sold, and the purchasers endorse them each time with their signatures or bechans. When the amount of the bill is remitted in cash, by another bill, or in any other form, the bill is signed by the payee, returned to the grantor, and filed as a voucher or khoka. Unless the bill is binajabti, that is unless it requires no letter of advice, it is usual for the correspondent of the grantor to send a letter of advice, intimating the payment of the money to the payee. No days of grace are allowed. The bill, if demanded, must be cashed on the specified day. If the payer delays, monthly interest is charged varying from one-half per cent if the drawer is a banker to three-quarters per cent if the drawer is a merchant. If payment is asked before the bill falls due, discount at a similar rate is charged. If the bill is dishonoured and sent back uncashed, the grantor must pay interest at double the rate of current interest from the date when the bill was bought. He must also pay a non-acceptance penalty or nakrai, which varies in different places. Carriage was also formerly charged according to the distance the bill had travelled.

If the bill is lost or stolen a duplicate or peth letter stating the amount of the bill and asking for payment is usually granted. If the duplicate letter is lost, a triplicate or parpeth mentioning both the bill and the duplicate is issued; and, if the triplicate is not forthcoming, an advice or jab mentioning the bill, the duplicate, and the triplicate, is sent to the same effect. The payer must satisfy himself as to the identity of the bearer of the bill and in doubtful cases should demand security before payment is made. If he pays the wrong man he has to bear the loss, and pay a second time to the holder of the duplicate and the triplicate. The payee in the case of an advice letter or jab passes a separate receipt, while the bill, the duplicate, and the triplicate are simply endorsed. After payment the banker debits the drawer with the amount paid. If a drawer, overdraws his account, and the bill is lost or dishonoured, he alone is responsible. It is usual after endorsing them to sell bills to bill-brokers or dalals, who are paid brokerage at the rate of 2/8 d (½ a.) on every £10 (Rs. 100) bill. As treasure is seldom sent, bills are generally adjusted by debits and credits and exchange bills or badli hundis, whose rates, vary according to the conditions of the transaction. The drawer pays commission or hokshai to the correspondent who disburses cash to the payee, and both drawer and purchaser pay a brokerage or dakuli for the sale of badli hundis. The interchange of bills has been greatly simplified by the introduction of a uniform coinage. Formerly the different rupees and the different rates

of exchange made the system most complicated, and was the source of no small profit to local bankers.

Where there is an agent or *munim*, the clerk or *gumasta* acts under the agent. As a rule there is no agent, and the clerk, who is generally a Brahman, is subordinate to his master alone and is treated by outsiders with much respect. He keeps the accounts, makes and recovers advances to husbandmen, superintends his master's establishment, looks after his lands and servants, and goes abroad to buy and sell goods according to his master's orders. Exclusive of food and other charges and travelling allowance the clerk's yearly pay varies from £5 to £30 (Rs. 50-300). At *Divali* in October-November he is given a turban or some other article of clothing and small presents on weddings.

Bankers as well as traders and well-to-do moneylenders keep three books, a rough and a fair journal or *rojmel* and a ledger or *khatevahi*. Some traders keep only one journal. Where two journals are kept the transactions of the day are entered in the rough journal as they take place. At the end of the day they are corrected, balanced, and entered at leisure in the fair journal. A general summary of each man's dealings is posted in the ledger under its proper head and the pages of the journal which refer to the details are noted. Many village lenders trust to the evidence of bonds and keep no books.

Currency.

In Shivaji's time (1674-1680) the following gold coins were known in the district: Gadars; Ibhramis; Mohars; Putalis; Satlamis; Huns of fourteen kinds Padshahi, Sangari, Achyutrai, Devrai, Ramchandrarai, Guti, Dharvadi, Shivrai, Kaveripak, Pralakhati, Pala-Naiki, Adavani, Jadmali, and Tadpatri; and Phalams of twelve kinds Afraji, Trimalari, Trishuli, Chandavari, Bildhari, Ulafkari, Muhammadshai, Veluri, Katerai, Devjavli, Ramnathpuri, and Kungoti. [Shivaji Bakhar by Krishnaji Anant Sabhasad. The chief rupees that were current during the Peshwa's rule were the *Malharshai* or *Rastia's* rupee, which was equal to fifteen annas of the present Imperial rupee; the Ankushi of three kinds, Kora nirmal chhapi or fresh from the mint and bearing a clear stamp, Madhyam chhapi or with a half-worn stamp, and Narayan chhapi; Belapuri and Bhaturi equal to fourteen annas; Bodke surti equal to 14¾ annas; Jaripatki, Kolabi, Miraji, Phora Chandvadi, and Phulshahari; Shikka of three kinds, halli, shri, and vai; and Tembhurni. The Peshwa's government used to add two per cent to all its collections to bring, them to the Malharshai standard. To raise the

coins to the *Ankushi* standard the last Peshwa Bajirav took an additional percentage which varied according to the pleasure of the mamlatdar. In the beginning of British rule the percentage was fixed according to the intrinsic value of the coins. [Captain H. D. Robertson, Collector, in East India Papers, IV. 181,580. For every 100 *Kora nirmal chhapi Ankushis* were demanded 100½ *Madhyam chhapi Ankushis*, 101¼ *Nardyan chhapi Ankushis* and *Phulshaharis*, 103¼ *Bhaturis*, 105¼ *Vai shikkas, Belapuris, Kolabis*, and *Tembhurnis*, and, 108 *Miraju*, Ditto.] Of the coins in circulation in 1821 about forty-nine per cent were *Narayan chhapi*, twenty-nine per cent *Kora nirmal*, and 7½ per cent *Madhyam chhapi ankushis*, five per cent *Belapuris* and *Bhaturis*, and 1½ per cent *Halli shikkas*. The proportion of the other rupees varied from one-ninth to two-ninths per cent.

The shikka rupees were the most popular with bankers, who generally preferred them to other coins. The other rupees continued legal tender till about 1827, when they were superseded by the Company's coin, but the shikka rupee remained current till about 1857. Till about 1834-35 when it was finally closed, the *shikka* rupees were made in the Poona mint by the old Tanksale or Mint-master family of Deshasth Brahmans under the supervision of British officers, who allowed ten per cent copper alloy for remuneration, Experts were appointed to examine the coins as they issued from the mint, and were paid $\frac{3}{2}d$. ($\frac{1}{4}$ a.) as commission on every hundred rupees examined. [Shortly before August 1822 the Poona mint was closed for some time owing to the discovery of frauds. As the want of currency caused inconvenience the mint was reopened. Mr. Chaplin's Report, 20th August 1822 (1877) Edition), 63. The mint seems to have been finally closed about the year 1834-35.] These rupees were generally exchanged at a discount of not more than ¾d. (½ a.).

At present, besides notes which are used only in the town and cantonment of Poona, the currency is partly silver partly copper. The silver coins are the Imperial rupee, half-rupee adheli, quarter-rupee pavli, and one-eighth rupee chavli. The ordinary copper coins are a half -anna piece dhabu, a quarter-anna piece paisa, and a onetwelfth-anna piece pai. Old copper coins called chhatrapati, also called shivrais or the coins of Raja Shivaji, worth about a quarter of an anna, are also current. The chhatrapati contains 136 grains troy (¾ tola) of pure copper, or 45 grains troy (¼ tola) more than the current quarter-anna, piece. Still it sells for less as one or two pieces have to be added in every rupee. The coinage of the chhatrapati or shivrai was stopped immediately after the beginning of British rule. But about thirty years ago large quantities of a counterfeit coin with an alloy of zinc were

secretly coined and circulated in the markets near Junnar and Ahmadnagar. Though gradually disappearing these false *shivrais* are still in use, and are so close a copy of the real *shivrai* that only an expert can tell them from each other. *Kavdis* or cowrie-shells from the Malabar coast are in use in making small purchases of groceries, vegetables, betel leaves, and oil. Four *kavdis*, equal to one-twenty-fifth of a *shivrai* that is about one-seventieth of a penny, is the smallest unit.

Insurance.

Insurance or *vima* was known before the time of the British. Valuable articles, jewels, bullion, coin, precious stones, cloth, cotton, silks, and shawls, and sometimes cattle grain and metal vessels, while being carried to and from Poona, were insured at Poona against loss by robbery, plunder by troops, fire or water, the carrier's negligence, his being carried off by a tiger, drowned in fording a river, or dying from epidemic disease The work of insurance formed part of the business of one or more bankers acting as partners. As insurance agents they undertook to send goods from one place to another on receipt of transit cost and insurance fees, varying from one to ten per cent on the value of the goods, according to the distance, the danger of robbers, and the time allowed for the journey. [Steele's Hindu Laws and Customs in the Deccan, 314-321. The chief details are:

Poona Insurance Percentage, 1818.

| PLACE | Gold and Jewels. | Cash, Silver, Cloth, and other Articles. | FLACK | Gold and Jewels. | Cash, Silver, Cloth, and other Articles. |
|---------------------|---------------------|--|-----------------------------|------------------------|---|
| Haidarabad | 1 to 21/2 | 3 to 5 | Narayanpeth | 3 to 4 | 3 to 5 |
| Benares and Oudh | 5 to 7 | No insurance. | Ahmadnagar and Satara | ½ to 1 | ½ to 1½ |
| Jaypur and Ajmir | 3 to 4½ | 4 to 5 | Dharwar and Hubli | 1 to 2 | 1 to 3 |
| Surat | 1½ to 2 | No | Bellari | 1½ to 3 | 1? to 3 |

| | | insurance. | Madras and Maisur | 2 to 3 | 2 to 5 |
|----------------------------------|----------|------------|----------------------|-------------|-------------|
| Ahmadabad | 3 to 5 | 4 to 6 | Surapur | 2 to 3 | 3 to 5 |
| Baroda | 2 to 4 | 3 to 5 | Machhli-Pattan | 2 to 3 | 3 to 5 |
| Burhanpur | 1¼ to 2¼ | 2½ to3½ | Tanjor | 2 to 3½ | 2 to 4 |
| Indur and Ujain | 2 to 3 | 3 to 4 | Aurangabad, Yeola | 1½ to 1¾ | 1 ¾to 2½ |
| Nagpur | 3 to 5 | 4 to 6 | and Malegaon | 194 | |
| Umaravati | 13 to 2i | 2½to 3½ | Bombay | ½to¾ | 1 to 1½ |
| Miraj, Sholapur, and Nasik | 1 to 2 | 2 to 3 | | | |

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Insurance was not undertaken for a longer distance than 200 miles (100 kos) unless on property of a greater value than £100 (Rs. 1000). Within that distance the value of goods whose safe carriage was insured varied from £10 to £10,000 (Rs. 100-1,00,000). The agents employed armed escorts and camels to convey the articles, and every year had to pay blackmail to the heads of the robber gangs who infested the country. The insurance agents escorts were Arabs, Rohillas, Pathans, or Rajputs. The camel-men who were Muhmmadans were called sarvans. Their wages were from fifteen to twenty per cent above those of ordinary messengers, and, in addition to their wages, they were paid rewards for each successful trip. They were noted for bravery and for their staunch regard for their employer's interests. They carried matchlocks, swords, daggers, and shields. They made very rapid journeys on trained camels, and if attacked by robbers made good use of their arms. Exclusive of the escort's wages the principal sums defrayed by the insurer were on account of loss and damage to the property injured. Interest from ¼ to ½ per cent was also paid to the owner if the goods insured did not reach their destination within the appointed time.

Under British rule order and peace have made insurance against the risks of the road unnecessary. Insurance against fire has not been introduced. In Poona a brauch of the Bombay Oriental Government Security Life Assurance Company Limited, has been open since 1874.

A few policies have been effected on the lives of Europeans, Eurasians, Hindus, and Parsis, but the business done has been small.

MONEYLENDERS.

Much of the moneylending is in the hands of Marwar and Gujarat Vanis. A considerable number of local Brahmans and a few Chambhars, Dhangars, Gosavis, Kunbis, Malis, Mangs, Marathas, Mhars, Musalmans, Shimpis, Sonars, Telis, Lingayat and Vaish Vanis, and others having capital also engage in moneylending. The business done by local lenders, most of whom have other sources of income and are not hereditary moneylenders, is less than that done by outsiders from Marwar and Gujarat. Except of a few town firms moneylending is not the lender's sole pursuit. About sixty per cent are traders including grocers and clothsellers, thirty per cent are husbandmen, and ten per cent are pleaders and others. [Mr. J G. Moore, C.S.] Besides lending money Marwaris deal in grain, groceries, cloth, and oil, some having shops in villages and others in country towns and market places. Except in some Junnar villages, where they have dealings with husbandmen, Gujarat Vanis are chiefly clothdealers who are settled in the larger towns and who lend money to weavers and other craftsmen and seldom to husbandmen. Lingayat moneylenders are chiefly ironmongers and grocers. The Brahman moneylender is generally a land proprietor, a corn-dealer, and in the city of Poona a pensioned Government servant, pleader, or contractor, and a cultivator in Khed and Junnar. He is generally found in towns and seldom lends except to the better class of landholders. The Maratha or Kunbi moneylender is a husbandman. He is found in villages and towns. As a rule he does not lend except to people who belong to his village or with whom he is connected. The others are chiefly found in Poona and in large towns. Of all lenders the Marwari has the worst name. He is a byeword for greed and for the shameless and pitiless treatment of his debtor. Some say Brahmans are as hard as Marwaris, others say they are less hard. Almost all agree that compared with Marwar and Brahman creditors, Marathas, Kunbis, and Gujarat Vanis are mild and kindly. A Marwari will press a debtor when pressure means ruin. The saying runs that he will attach and sell his debtor's cooking and drinking vessels even when the family are in the midst of a meal. Brahmans, whose position, in society tends to make them popular, are shrewd and cautious in their dealings, and as a class avoid extreme measures for the recovery of their debts. A Gujarat Vani, a Maratha, or a Kunbi creditor will seldom ruin his debtor. It is not easy to make moneylending pay. Want of experience often leads to loss of capital. Except when their immediate interests

clash moneylenders as a class are friendly to each other, avoid competition, and deal honestly among themselves.

Interest.

The accounts of the rates of interest at the beginning of British rule vary. In 1821, according to the Collector Captain Robertson, the usual rate of interest was twelve per cent except in the Mavals where it was from twenty to twenty-four per cent. A ¼ anna per rupee a month or about eighteen per cent was an usual rate. When the interest was paid in grain the usual monthly rate was a sher the rupee or seventyfive per cent. If grain was borrowed for seed, the debt was cancelled by repaying double the quantity borrowed any time within a year; if the grain was borrowed for food one quarter to three-quarters more were paid in return. [East India Papers, IV. 580.] About the same time Dr. Coats (29th February 1820) described the village shopkeeper as lending a few rupees to the villagers without security and charging ½ anna interest a month or thirty-seven per cent. A good deal of their traffic with the villagers was by bartering gram and other field produce for groceries. The usual yearly rate of interest was twenty-four per cent. Loans of grain and straw were repaid at fifty per cent, and often at seventy-five per cent. [Bom. Lit. Soc. Trans, III, 236.]

At present (1883) the rate of interest varies with the credit and the need of the borrower, the habits of the class to which he belongs, the risk of the industry in which he is engaged, and the dearness of money. The interest charged is always higher in the country than in the city and presses more on poor than on well-to-do landholders. In small transactions where an article is given in pawn the yearly rate of interest varies from nineteen to thirty-seven per cent. In petty field advances on personal security the usual yearly rate is 37½ per cent. ($\frac{1}{2}$ a, the rupee a month). When there is a lien on the crops the payment is generally in grain and the interest varies from twenty-five to fifty per cent. In large transactions with a mortgage on movable property, nine to twelve per cent are charged, and in mortgages of immovable property the rate varies from six to twelve per cent. Where loans are secured by mortgages on land, the average rate in the Haveli sub-division, where the conditions of landed property are specially favourable, varies from thirteen to nineteen per cent. [Deccan Riots Commission Report. 66-67. In less favoured sub-divisions the rate not uncommonly rises to twenty-four per cent. Money invested in buying land is expected to yield a clear profit of nine to twelve per cent. Interest is now calculated according to the English calendar year in all transactions which do not take the shape of book-accounts. Book-

accounts and merchants' accounts are generally regulated by the samvat year which begins at *Divali* in October-November; Brahmans and other non-professional lenders generally keep their accounts by the shak year which begins on the first of Chaitra in March-April. If payment is made within three years the extra or intercalary month is charged; if the account runs for more than three years the extra month is excluded. The Imperial rupee is the standard in all transactions. Shopkeepers not uncommonly have dealings in shikka rupees. In such cases, if the settlement is private, it is made according to the market value of the coin. In disputed cases, when the parties come to court, the shikka rupee is turned into the Imperial rupee at a reduction of nearly two per cent. [Gov. Res 25th January 1883, allows a deduction of one rupee and fifteen annas for every 100 rupees.] At seed time moneylenders usually advance grain for seed and for the maintenance of the landholder. Advances of seed and of food grain are repaid six months after in kind or in their money value at the rate of 125 per cent or savai, of 150 per cent or didhi, or of 200 per cent or dam dupat of the grain advanced. Contractors, who of late years are a growing class, pay twelve to twenty-four per cent interest and at the time of borrowing allow a discount or *manuti* of three to five per cent. Their dealings are all in cash. They have fair credit and are well-to-do. They borrow money to help them to carry out their contracts and repay the loan as soon as the contract is finished. Moneylenders have good credit and borrow at six to twelve per cent a year. Traders and merchants whose credit varies with their personal position borrow at nine to eighteen per cent. Khists or small loans payable by daily or weekly instalments of a few annas are occasionally made in some parts of the district.

BORROWERS.

The chief borrowers of the district are land-owning Kunbis. Contractors of various kinds, who are a growing class, also borrow. Enterprising moneylenders borrow at low interest and lend at rates high enough to cover losses and leave a considerable margin of profit. Traders and merchants rarely borrow except when they make large purchases of the articles in which they deal. The few craftsmen who are free from debt act as moneylenders. Though most craftsmen are in debt they are not so deeply involved as landholders, partly because they have no security to offer, partly because they have no money rents to pay. In ordinary years, as a class, craftsmen are better off than husbandmen. Still, of late years, competition has closed many of the old callings, and craftsmen, who have not suffered from competition, are generally afflicted by a craving for some form of vicious indulgence. Except for

their intemperate habits craftsmen are generally intelligent, able so care for their interests, and guard themselves from being overreached by false claims. Craftsmen borrow at twelve to twenty-four per cent. Besides the interest, they have to accept a five per cent deduction from the amount of the nominal loan. They are honest debtors and do their best to pay their debts repaying a small instalments. They dislike borrowing and do not borrow except under considerable pressure. They reckon indebtedness a burden and try to shake it off as soon as they can. Of the lower orders domestic servants and labourers are the only classes who are comparatively free from debt. House servants if forced to borrow repay the loan by monthly instalments. They are generally regular in their payments and careful to pay what they owe. Except during the few years before and after the close of the American war, when the Peninsula railway and other local public works were in progress and when the wages of unskilled workmen in Bombay were exceptionally high, labourers were never better off than they now are. Fifty years ago a labourer could hardly earn wages enough to keep himself and his family and could save nothing. A labourer then was badly fed and clad; the cheapness of the articles of daily use alone kept him from starving. The first marked improvement in the labourer's condition was caused by the demand for labour to complete the great public works which were in hand both locally and in Bombay between 1862 and 1871. The Deccan Riots Commission estimated that £250,000 to £300,000 (Rs. 25-30 lakhs) of the whole amount spent in making the Peninsula railway within Poona limits remained in the district in payment of local labour. Just beyond the west limits of the district were the great Sahyadri works where on a distance of fourteen miles 40,000 labourers were at one time employed by one contractor. At the same time the foreshore reclamation and other works in hand in Bombay caused so great a demand for labour that in 1863 the monthly wages of unskilled workmen rose from 15s. 6d. (Rs. 7 ¾) to £1 7s. (Rs. 13½). Great public works in the Poona district continued to give the labourers highly paid employment till the year 1871. At present (1883) a labourer can command not only the necessaries of life for himself and his family, but ordinary comforts and even a few luxuries. He spends his gains on clothes, food, and liquor more than on ornaments. Labourers work in the fields from August to March; at other times they are employed on house-building and other public or private works. On his personal security a moneylender generally advances a labourer up to £10 (Rs. 100). Sometimes the security of a fellow-labourer is taken.

Husbandmen.

Since before the beginning of British rule the greatest borrowers in the district have been the landholders. The ordinary Kunbi is a simple welldisposed peasant content with the scantiest clothing and the hardest fare. Though unschooled and with a narrow range of intelligence he is not without manly qualities and meets with a stubborn endurance the unkindly caprices of his climate and the hereditary burden of his debts, troubles which would drive a more imaginative race to despair or stimulate one more intelligent to new resources. The apparent recklessness with which he will incur obligations that carry the seeds of ruin has gained for the Poona landholder a character for extravagance and improvidence. The apparent recklessness is often necessity. His extravagance is limited to an occasional marriage festival, and his improvidence is no greater than that of all races low in the scale of intelligence who live in the present. [Deccan Riots Commission Report, 22] The want of forethought, which prevents the landholder overcoming the temptation to which the uncertainty of the seasons and the varying value of his produce give rise, is caused by a want of power to realize future troubles rather than by a spirit of extravagance or waste. In 1875, in the opinion of the members of the Deccan Riots Commission, the expenditure on marriage and other festivals was less the cause of the husbandman's indebtedness than was commonly supposed. Compared with his means the expenditure was extravagant, but the occasions seldom occurred. In a course of years the total sum spent was probably not larger than a landholder was justified in spending on special and family pleasures. The expenditure on family pleasures formed an important item on the debit side of many accounts but it was rarely the nucleus of a debt. Even at twenty-four per cent interest the £5 to £7 10s. (Rs. 50-75) spent by an average landholder on a marriage, with fairness on the lender's part and without the addition of other debts, could be rapidly paid. In the opinion of the Commission the bulk of the landholder's debt was due less to the large sums spent on ceremonies than to constant petty borrowings for food and other necessaries, to buy seed, to buy bullocks, and to pay the Government assessment. The Commissioners held that in a district with so uncertain a climate as Poona and with people whose forethought was so dull, the payment of a regular money rental, even when the rental was far below the standard of a fair season, must lead to borrowing.

When the country came under British rule, the bulk of the husbandmen were in debt. In 1819 in the township of Loni on the Ahmadnagar road, about ten miles east of Poona, Dr. Coats found that of eighty-four families of husbandmen all except fifteen or sixteen were indebted to moneyed men generally Brahmans or shopkeepers.

The total private debt was £1453 (Rs. 14,530) and there was a further village debt of £307 (Rs. 3070). The sums owed generally varied from £4 to £20 (Rs. 40-200), but some men owed as much as £200 (Rs. 2000). The interest was usually twenty-four per cent, but when small sums were borrowed interest was as high as forty per cent. The cause of debt was generally marriage expenses or the purchase of cattle and food. Each debtor had a running account with his creditor and paid sums of money from time to time. According to the accepted rule the interest of a debt could never be more than the principal. In settling disputes the juries followed the rule dam dusar kan tisar, that is double for money treble for grain. Few debtors knew how their accounts stood. Most of them believed that they had paid all just demands over and over again. About a fourth of the people were indebted to their neighbours for grain and straw and borrowed to support themselves and their cattle till next harvest. They repaid these advances in kind at fifty to seventy-five per cent interest. In ordinary times the whole of a husbandman's produce was mortgaged before it was reaped. In bad seasons the evil was much increased. If any of their cattle died they had no means of replacing them. If they failed to raise an advance they left their fields and tried to save some money as Brahmans' servants or perhaps as soldiers. [Trans. Bom. Lit. Soc. III. 226.] [From the Deccan Riots Commission Report (1876).] In 1822 according to Mr. Chaplin, owing to the oppression of revenue contractors, the landholders in many villages, though frugal and provident, were much in debt to bankers and merchants. Many of these debts were of long standing. They were often made of compound interest and fresh occasional aids so mixed and massed that the accounts were exceedingly complicated. A husbandman who fell in debt could seldom free himself. The husbandman's debts were of two kinds, village debts and private debts. The village debt usually arose from advances or loans made by bankers to the Maratha Government on the security of the revenues of certain villages. The private debts were the result of the revenue farming system under which the state dues were collected through bankers or savkars who usually received in kind from the villagers what the bankers had paid to the Government in cash and drafts. The mass of the husbandmen had not interest or title enough in their land to be security for a large debt. Miras or hereditary holdings were sometimes mortgaged, but their selling value was estimated at not more than two or three years' purchase, and land yielding £20 (Rs. 200) of gross produce could seldom be mortgaged for more than £10 (Rs. 100). The ordinary dealings between the moneylender and the landholder were based on the teaching of experience rather than on any power of compulsion in the hands of the creditor. The recognized mode of recovering debt was

for the lender to send a dun or mohasal whose maintenance had to be paid daily by the debtor. Another mode was to place a servant in restraint or dharna at the debtor's door, or to confine the debtor to his house or otherwise subject him to restraint. Against the humbler debtors severer measures were used. The landholder's constantly recurring necessity could not be relieved unless he maintained his credit by good faith. On the other hand the Government in no way helped the lender to exact more than a fair profit which considering his risks would also be a large profit. Honesty was the borrower's best policy and caution was a necessity to the lender. There was a considerable burden of debt and many landholders were living in dependence on the lender, delivering him their produce and drawing upon him for necessaries. The landholder's property did not offer security for large amounts. The debtor's cattle and the yearly produce of his land were the lender's only security. As immoveable property was not liable to sale for debt, and as the hereditary or *miras* title was of no value to a non-agricultural landlord, the mortgage even of hereditary or *miras* land gave the lender a hold on the produce rather than on the land. Rates of interest were very high and much of the debt consisted of accumulations of interest. The causes of indebtedness were chiefly the revenue system and sometimes expenditure on marriages or similar occasions. The amount of individual debt was usually moderate. Most moneylenders were men of substance who had a staff of duns and clerks. In recovering debts the lender had little or no help from the state. At the same time he had great license in private methods of compulsion. Under British management the lender's power of private compulsion was curtailed and courts presided over by the Collectors were opened to suitors. At first the lenders did not go to the courts. This and other causes caused a contraction in the moneylender's dealings. Still the landholder's necessities compelled him to keep on terms with his creditor.

There are no records bearing on the relations between the husbandmen and their creditors in the years immediately following Mr. Chaplin's report. Later information shows that the burden of debt grew heavier rather than lighter before the introduction of the Civil Court Procedure in 1827. The first regular Civil Procedure was introduced into the Bombay Presidency by Regulations II. III. IV. and V. of 1827. Regulation IV. provided the procedure and Regulation V. the limitations for civil suits. In Regulation IV. the cattle and tools necessary for the support of the agricultural debtor were declared exempt from seizure on account of debt. Regulation V. limited the yearly rate of interest recoverable in a civil court to twelve per cent. When the new laws came into operation, except in hereditary or *miras*

land, the husbandman had no title to his holding, and on account of the fall in the value of produce the revenue demand left little margin to the landholder. Under these circumstances the lender had little security for debt.

As the courts gave the lenders the means of speedily realizing their claims they were soon resorted to. In 1832, when the extreme cheapness of grain was pressing with terrible weight on the agricultural classes, the French traveller Jacquemont, a somewhat unfriendly critic, described the cultivators all over India as owing instead of owning. They had almost always to borrow seed from the banker and money to hire plough cattle. Every husbandman had a running account with a lender to whom during all his life he paid the interest of his debt, which swelled in bad years and when family ceremonies came round. In no part of India did indebtedness cause more misery than in the Deccan. Formerly the law or custom prevented a lender from more than tripling the original loan by compound interest neither personal arrest nor seizure of immovable property was allowed. The English law removing all such restraints caused much horror. To carry out the law judges had to strip old families of their ancestral homes. [Jacquemont'a Voyages, III. 559.]

The first detailed record of the relations between husbandmen and their creditors is the result of an inquiry made in 1843, by Mr. Inverarity, the Revenue Commissioner of the Northern Division. Mr. Stewart, the Collector of Poona, after premising that it was well known that all enactments to fix a lower than the market rate of interest had the effect of enhancing it, stated that money was frequently borrowed on mere personal security at thirty to sixty per cent. Considering that the borrowers seldom owned any property it seemed to him a matter of surprise that they had credit at all rather than that the rate of interest was so high. The views of Messrs. Frere and Rose his assistants were somewhat at variance with the Collector's views. Mr. Frere stated that there were few villages under his charge in which there was one landholder unburdened with debt and scarcely a single village in which three persons could be found not involved for sums of over £10 (Rs. 100). These debts were contracted on marriage and other social occasions. The interest varied from twenty-five to sixty per cent according to the circumstances of the borrower and the description of security given. Mr. Frere recommended some measure restricting interest. Mr. Rose observed that the usurious character of the village moneylender was notorious. He thought the poverty of the Deccan landholder was in great measure due to the lender's greed. He feared it would be difficult to cure the evil as the people looked on the

moneylender as a necessity. Their thoughtlessness and ignorance would frustrate any attempt to check or put a stop to the lender's exorbitant gains. In cases' where landholders were concerned, the interest was generally enormous and agreements were fraudulently procured. He also recommended that something should be done to limit the rate of interest. In summing this evidence the Revenue Commissioner seems to have shared the Collector's views against trying to lower interest by legal enactment. He noticed chat the moneylender was frequently part of the village community. The families had lived for generations in the same village helping the people from father to son and enabling them to meet urgent caste expenses.

In this correspondence the attention of the reporting officers was usually fixed on the question of usury. It appears that as yet the operation of the law had not aggravated the burden of debt to any degree of severity. This was natural. The husbandmen had generally no title in his land except the title conveyed by the hereditary or *miras* tenure and his stock and field tools were safe from seizure. Another notable point in this correspondence is that the moneylenders are spoken of as the village Bania, the village banker, and under similar terms which show that the old banker was the only lender with whom the landholders had dealings. It is also noteworthy that expenditure on marriages, caste rites, and similar occasions is generally assigned as the cause of indebtedness. One reason why social charges are noticed as the chief cause of debt may be found in the rapid spread of tillage which in different parts of the district followed the lowering of the rates of assessment in 1S36 and the following years. The lowering of assessment gave the landholder a strong inducement to add to his holding and the lender was encouraged to make advances by the enhanced security and the ready machinery which was available for recovering debts. It was hoped that the permanent title and the light assessment guaranteed by the survey settlement would so increase the landholder's profits and stimulate his industry that by degrees he would free himself from debt. The increased production and the stimulus to agricultural enterprise did indeed follow, but debt instead of diminishing increased. The records belonging to the period between 1850 and 1858 bring to notice two marked features in the relations between the lender and the husbandman which followed the changes in the revenue and judicial systems. These two features are the growth of small moneylenders and the operation of the laws to the disadvantage of the landholders. In 1852, Captain, the late Sir G., Wingate, then Survey Commissioner, wrote that the facilities for the recovery of debt offered by the civil courts had called into existence an

inferior class of moneylenders who dealt at exorbitant rates of interest with the lower agricultural poor. As the value of the landholder's title under the survey settlements came to be recognized, his eagerness to extend his holding grew. A fresh start was given to the moneylender in his competition with the landholder for the fruits of the soil. The bulk of the people were very poor and the capital required for wider tillage could be obtained only on the credit of the land and its produce. Even under the reduced rates of assessment existing debt left the landholder little margin of profit. This margin of profit would not go far towards covering his increased needs to provide stock and seed and to meet the assessment on the additions to his holding. At the same time for the first year or two his return in produce would be nominal. Even the most cautious could not wait till their profits enabled them to take up fresh land because they feared that the more wealthy or the more reckless would be before them. In 1855 it had become well known that the Regulation restricting the rate of interest to twelve per cent was evaded by the moneylenders by deducting discount, or more properly interest taken in advance from the amount given to the debtor. The usury law had the effect of placing the debtor in a worse position by compelling him to co-operate in a fiction to evade the law. The bond acknowledged the receipt of an amount which had not been received. In 1855 an Act was passed repealing the restriction on interest. Another result of the enhanced value of agricultural investments caused by the survey settlement was the spread of the practice of raising money on mortgage of land and of private sales of land to moneylenders. Private sales of land were doubtless made in liquidation of debt and not for the purpose of raising money as no landholder would part with his land to raise money. It must therefore be presumed that in such cases the moneylender compelled the transfer by threats of imprisonment or by other terrors. Although moneylenders were adding to their land by private purchases the sale of occupancies under decree was rare. This was probably due to several causes. They people had not acquired full confidence in the title given by the survey settlement; they probably had hardly confidence in the stability of the British rule. The only land sold was hereditary or *miras* which as it was held by a recognized title was reputed to be safe. It was seldom a creditor's interest to sell his debtor out of his holding The landholder's stock and field tools were protected from sale and the creditor was likely to make more by leaving him in possession of his land than by lowering him to a tenant. The sale of immovable property for debt was opposed to custom and public opinion, and unless the land was directly made security the courts would be reluctant to have it sold if the claim could be satisfied by other means more consonant with native usage. The judicial returns

show how much more favourable the mode of disposing of business in the courts before 1859 was to defendants than the more strict procedure which was introduced in 1859. Under the earlier system about one quarter of the cases decided were adjusted without judicial action; in 1859 the proportion settled without judicial action fell to about one-seventh. [The details were; in 1850 of 8893 cases 2355 were settled without judicial action; in 1859 of 10,060 cases 1869 were settled without judicial action.] At this time (1850-1859) the returns show that the imprisonment of the debtor was a favourite method of procuring the settlement of a debt. The sale of land was rare and the sale of the debtor's house was an innovation. Imprisonment would therefore be more often used. During the three years ending 1853 there was an average of 530 civil prisoners in the Poona Jail, compared with an average of 204 in the three years ending 1863.

In 1858, when Lord Elphinstone was Governor of Bombay, he recorded his conviction that the labouring classes suffered enormous injustice from the want of protection against the extortionate practices of moneylenders. He believed that the civil courts had become hateful to the mass of the people because they were made the instruments of the almost incredible rapacity of usurious capitalists. In Lord Elphinstone's opinion nothing could be more calculated to give rise to widespread discontent and dissatisfaction with British rule than the practical working of the existing law.

Shortly after this the rise in produce prices improved the landholder's condition. Notwithstanding the pressure of debt and of injurious laws about 1860 the landholders were better off than they had been foryears. The conditions of agriculture had been favourable. For nearly twenty years landholders had enjoyed a fixed and moderate assessment and large tracts of arable waste had been brought under tillage. Communications and means of transport were improved, the railway whose construction had enriched the district by about £200,000 (Rs. 20 lakhs) was within easy reach, and in spite of a series of good seasons produce prices had risen. Although the lender might take him to court, the landholder had a chance of being able to borrow from a rival lender and the court would give time. If a decree was passed against the borrower, his stock and field-tools were safe and his land was not in danger. He might be imprisoned until he signed a new bond; he was not likely to be made a pauper.

In 1859 two enactments aggravated existing evils. These were the Civil Procedure Code and the Statute of Limitations. Whatever facilities

the law afforded the creditor in 1852 were greatly enhanced by the introduction of the 1859 procedure, and by the punctual conduct of judicial duties which was now exacted from the subordinate courts. At the same time the landholder's credit was enhanced by adding his land and his stock and field tools to the security which was liable for his debts. In 1865 the introduction of compulsory registration of deeds dealing with immovable property protected the creditor from attempts to repudiate or dispute a registered bond. In the meantime the landholder's estate had risen in value and new cultivation offered securities for new loans. His personal solvency was assured by the large demand for labour on the railway and other public works, and in 1865 his title in his land was recognized and secured by an Act which confirmed the rights vested in him by the survey settlement. Between 1862 and 1865 the American war, while on the one hand it poured money into the country to seek investment, on the other hand raised to an extravagant pitch the value of agricultural securities. To these causes tending to attract capital to the business of agricultural moneylending it may be added that in the dearth of other industries, with a population whose wants embraced little but the merest necessaries, capital, which under other conditions would find employment in trade or manufactures, naturally turned to agricultural investment. Almost the only course open to the clerk or servant who had saved a little money in a village moneylender's employment, was to set up as a moneylender.

The most unscrupulous class of petty moneylenders increased considerably during the ten years ending 1875. It became the landholder's common practice to borrow from one lender to pay another or to borrow from two or three at a time. One result of this competition of low-class lenders was that even respectable londers were obliged to resort to the methods of swelling the debt and coercing the debtor which the petty lenders had introduced. [Sir G. Wingate thus described the change in the relations between the lender and the landholder: The prosperity of the landholder is no longer necessary to the prosperity of the lender. The village lender needs no longer to trust to the landholder's good faith or honesty. Mutual confidence and goodwill have given way to mutual distrust and dislike. The ever-ready expedient of a suit give the lender complete command over the person and property of the debtor. It becomes the lender's interest to reduce the borrower to hopeless indebtedness that he may appropriate the whole fruits of his industry beyond what is indispensable to his existence. This the lender is able without difficulty to do. So long us a landholder is not deeply involved the lender readily affords him the means of indulging is any extravagance. The simple

and thoughtless landholder is easily lured into the snare. He becomes aware of his folly only when the toils are fairly round him and there is no escape. From that day he is his creditor's bondsman. The creditor takes care that the debtor shall seldom do more than reduce the interest of his debt. Do what he will the landholder can never get rid of the principal. He toils that another may rest; he sows that another may reap. Hope leaves him and; despair seizes him. The vices of a slave take the place of a freeman's virtues. He. feels himself the victim of injustice and fries to revenge himself by cheating his oppressors. As his position cannot be made worse, he grows reckless. His great endeavour is to spoil his enemies the moneylenders by continual borrowing. When he has borrowed all that one lender will advance, it is a triumph to him, if lies and false promises, can win something more from another, The two creditors may fight, and during the fray the debtor may snatch a portion of the spoil from both. Deccan Riots Commission Report, 45-46] In the process of swelling the account the lender was greatly helped by the Limitation Act of 1859. This Act was passed with the object of helping the borrower by making it impossible for the lender to bring forward old claims which the borrower could not disprove. The lender wrested the provisions of the Act to his own advantage by forcing the debtor, under threat of proceedings, to pass a fresh bond for a sum equal to the amount of the original bond together with interest and often a premium. On the 17th of May 1875. Mr. W. M. P. Coghlan, the Sessions Judge of Thana, wrote, 'In bonds founded on old bonds which have nearly run the period of limitation, it is impossible to estimate what proportion of the consideration was actual cash payment. The Limitation law, a statute of peace made for the protection of borrowers, became an engine of extortion in the hands of the lenders. When a bond is nearly three years old the creditor by threatening proceedings presses the debtor to pass a new bond for a sum equal to the principal and interest of the old bond and sometimes with an additional premium.' According to the Judge of the Small Cause Court of Ahmadabad, 1st September 1873, the short term which the Limitation Act introduced caused great hardship and fare shed lenders with opportunities for cheating their debtors. The debtors are harassed devery two years to pay the money or to pass a new bond. Creditors always leave a margin of one year as a measure of precaution. If the law makes three years they always make it two, because they may have to go to another place or the debtor nay go elsewhere. Two years is not a long enough time to give a husbandman to pay money, ferhaps it was borrowed for his son's marriage, or for planting sugarcane, or making a garden, and will take him or seven years to clear.] His inability to pay on account of the uncertainty of the seasons made this practice of passing new bonds at

the end of every two or three years press specially hard on the Poona husbandman.

Though the landholders' gains from the high prices of produce during the four years of the American war (1862-1865) were to a great extent cancelled by the badness of those seasons, still the husbandmen drew large profits from the high wages of unskilled labour, which in Bombay rose from 15s. 6d.(Rs. 7¾) to £l 7s. (Rs. 13½) a month. Besides in Bombay high wages were paid to the workers in the railway especially on the ascent of the for pass which was not completed till 1863. Following on this after a short interval came an increased expenditure on local public works, which in the Poona district alone in 1868-69 rose to about £310,000 (Rs. 31 lakhs). During the five years ending 1867, the cantonment of Poona was the scene of extraordinary activity in private housebuilding. The sums spent on ordinary labour in these works could not have been much, if at all, less than those spent by Government in the same area. Besides the advantage of high wages the agricultural population drew a more questionable advantage from their position as landholders. Through, the immense stimulus given to the production of cotton and because of the cheapness of money, field produce and land had risen so high that the landholder's power as a borrower was that of a capitalist rather than of a labourer.

The increase in the value of land is illustrated by the rise in the number of suits connected with land from seventy-five in 1851 to 282 in 1861 and to 632 in 1865. [The details are; 1861, 282 suits; 1862, 591; 1863, 520 154, 580; and 1803, 632.] At the same time the increase in the landholder's credit is shown by the fall in the compulsory processes for the recovery of debt. Thus, though during this period of extremely high prices, the husbandman's land may have, on account of the badness of the seasons, brought him little actual income, it brought him the fatal gift of unlimited credit.

In 1865 with the close of the American war the inflow of capital ceased. _ Prices did not at once fall as 1866-67 was 3 a season of severe drought, 1867-68 of partial failure, and 1870-71 of serious failure, and the very large sums which were spent on local works till 1871 further helped to keep up produce prices. After 1871 the expenditure on public works declined, the harvests were good, and the price of millet fell from forty-four pounds in 1871-72 to sixty-five pounds in 1873-74. From 1867 the settlements of land revenue made thirty years before began to fall in, and the revision resulted in a

considerable increase in the Government demand. [The following table shows the results of the revisions:

Poona Revision Survey Remits, 1869-1872.

| SUB-DIVISION. | Former Demand. | Revised Demand. | Increase. | Percentage. |
|---------------|-------------------|--------------------|-----------|-------------|
| | Rs. | Rs. | Rs. | |
| Indapur | 81,184 | 1,25,845 | 44,661 | 55. 01 |
| Bhimthad | 81,475 | 1,33,131 | 51 656 | 63.40 |
| Haveli | 80,475 | 1,33,174 | 52,699 | 65.48 |
| Pabal | 92.359 | 1,39,315 | 46.956 | 50.84 |
| Supa | 59,926 | 78,788 | 18,862 | 31.47 |

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All these circumstances contributed to contract the landholder's means and materially reduced the margin available for the lender, while it is possible that the landholders did not contract in the same proportions the more costly mode of living which high wages had justified. Debts increased and the husbandmen began to mortgage their lands more deeply than before. In 1871 the failure of crops called for large remissions. Other causes prevented the rental actually levied from reaching the full amount of the revised rates, and in 1874, in consequence of the fall in produce prices, the revised rates were reduced. Still the effect of the new settlement was a large retrenchment from the landholder's profits.

The effect of the sudden fall in produce prices between 1871-71 and 1873-74 aggravated by other circumstances, was first to reduce the landholder's power of paying, secondly to make creditors seek by all means in their power to recover their debts or to enhance their security by turning personal debt into land mortgage, and lastly to check further advances to husbandmen. [The lender's distrust in the borrower was shown by the rise in the number registered deeds in Bhimthadi and Indapur from 752 in 1866 to 874 in 1869, 1195 1870, 1217 in 1871, 1874 in 1872, and 1414 in 1873.] During the same period there was a marked increase in the difficulty of collecting the land revenue. Not only in the sub-divisions where the enhanced

assessments pressed directly upon the moneyed classes, who were able to organize and sustain resistance to the demands of Government, but in others, the period from 1868-69 to 1873-74 was marked by an unusual amount of remissions and arrears. The business of lenders was also reduced to the last point. At the same time the area held for tillage considerably contracted.

The pressure on the landholder to pay what he owed and the unwillingness of the lender to make further advances were gradually increasing from 1869 to 1875. An order of Government in the Revenue Department, [Resolution 726, 5th February 1875] framed with the object of preventing the sale of land, directed that process to recover land revenue should issue first against the movable property of the occupant, and that the land should not be sold until after the sale of the movable property. This order the moneylenders turned to their own advantage at the expense of the landholders. In February and March 1875 the lenders refused to pay the second instalment of revenue on land whose produce they had received from their debtors. Landholders who found their movable property attached, after they had handed their creditors the produce of the land on the understanding that they would pay the rents, naturally felt that they were the victims of deliberate fraud. The feeling of ill will was strong and widespread.

In 1874 a band of Koli outlaws, on the western hills of Poona and Ahmadnagar, directed their robberies almost entirely against the lending class. So great was the terror that for many months a large tract of country enjoyed complete freedom from the exactions of Marwari creditors and their agents. [Between 1870 and 1874] moneylenders suffered in one case of murder, seven of robbery, eight of mischief, twenty-four of theft, twenty-nine of hurt, and eight of criminal force, or a total of seventy-seven offiences in five years. Deccan Riots Commission Report, 9.1 This fact and the story that an Englishman, who had been ruined by a Marwari, had petitioned the Empress and that she had sent orders that the Marwaris were to give up their bonds brought matters to a crisis. Even the more educated villagers believed that on a report from India orders had come from England that the Marwaris were to have their bonds taken from them. In some form or other this report was circulated and a belief established that acting under orders from England, the Government officers would connive at the extortion of the Marwaris' bonds. During 1874 the district officers had been called upon to furnish information regarding the people of the district for the compilation of the Bombay Gazetteer. Among other subjects the business of the moneylender, the leading characteristics of his professional dealings, and his relations to the landholding classes had been inquired into. This gave room for supposing that the Government, hearing of the ill-treatment of the landholders by the lenders, had caused inquiry to be made and had now givenan order which would redress their wrongs. This resulted in the Deccan Riots of 1875. [The feeling of hostility between the landholders and their creditors which found expression in the riots had been increasing for some time, and had it not been for a transient period of prosperity, the crisis would have happened long before. Bom. Gov. Sel. CLVII (New Series), 2.]

Deccan Riots

The first sign of open hostility to the Marwari moneylender among the orderly villagers of the Poona plain, was shown by the people of Karde in Sirur. A deshmukh, or district hereditary officer, named Babasaheb, a man of good family and some influence, who had made a fortune in the service of His Highness Sindia, had settled in the village. He spent his fortune and fell into debt. Two of his creditors, Kaluram and Bhagvandas, both of them Marwaris, got from the Talegaon court decrees against Babasaheb. Kaluram took out a warrant of arrest. Babasaheb gave Kaluram personal ornaments and the warrant was not executed. About four months later some ornaments and property belonging to the temple of Vithoba at Babasaheb's house were attached, but, at the instance of the villagers, Kaluram allowed the attached property to remain in deposit with a third party for two months. At the end of the two months, as Babasaheb had not paid the value, Kaluram carried off Vithoba's ornaments. A third execution was issued on Kaluram's decree, and Babasaheb's houses and lands were attached and sold to Kaluram for the trifling sum of £15 (Rs. 150). In December 1874 Kaluram began to pull down Babasaheb's house, and refused to listen to his entreaties not to ruin the house. Enraged at Kaluram's conduct Babasaheb gathered the villager., and persuaded them that as the Marwaris had begun to ruin them they must cease to borrow from them and refuse to work for them or to buy from them. The villagers agreed and one of them opened a grocer's shop at which all the village purchases were made. The Marwaris were put to the greatest inconvenience for want of servants. Besides refusing to serve them as water carriers, barbers, or house-servants, the villagers annoyed the Marwaris by throwing dead dogs and other filth into their houses. These signs of hate so scared the Marwaris that they retreated to Sirur for police protection and represented to the Magistrate that they were in bodily fear of the villagers. At the same time the villagers submitted a petition to Government praying that as they had given

their grain to the Marwaris, the Marwaris should not be allowed to leave the village until the Government assessment had been paid. The Magistrate reported to the Commissioner the dangerous spirit shown by the people. The example of the people of Karde was followed by other villages. Before any outbreak occurred the Marwar moneylenders had in several places been subjected to similar social outlawry and petty annoyance. The following is the substance of a samapatra or agreement executed by the people of Kalas in Indapur. Fields belonging to Gujars which may have been leased to villagers shall not be tilled. No man nor woman shall take service with a Gujar. Any one tilling a Gujar's field or working for him will be denied the service of the village barber, washerman, carpenter, ironsmith, shoemaker, and other village servants. Fields belonging to lenders other than Gujars shall not be taken on lease by any one. Fields already leased shall be given up. If the village Mhars undertake to dun the villagers on behalf of the Gujars they shall be refused their usual alms and bundles of grain stalks. The villagers shall abide by these conditions. If the headman joins the Gujars and other lenders, his hereditary right shall cease and his authority be disregarded. If the village priest or accountant joins the moneylenders his dues shall not be paid. The villagers shall engage any priest they choose, and the claims of the hereditary priest will not be recognized. If the headman or the priest is put to any expense on behalf of the villagers the villagers shall subscribe the sum. All landholders shall behave in accordance with these rules; any one acting to the contrary will neither be allowed to come to caste-dinners, nor to marry with the people of his caste. He shall be considered an outcaste. He will not be allowed to join the community without their unanimous consent, and will have to pay the fine which the community may inflict on him and further will have to give a dinner to the community. Dated Vaishakh Shuddh 2nd Shake 1787, that is 7th May 1875. Afterwards under the influence and advice of the Superintendent of Police the villagers agreed to return to their old relations with the moneylenders.]

The first outbreak occurred at Supa, a large Bhimthadi village, on the 12th of May 1875. The victims were a large number of Gujarat Vani moneylenders. Their houses and shops were attacked by a mob recruited from the hamlets round Supa who had met nominally to attend the weekly market. One Gujar's house was burnt down, and about a dozen other houses and shops were broken into and gutted. Account papers, bonds, grain, and country cloth were burnt in the street. No personal violence was used. The chief constable of the subdivision with six or seven constables secured about fifty persons and recovered stolen property worth £200 (Rs. 2000). The loss was

represented by the Gujars at £15,000 (Rs. 1½ lakhs); it was not really more than £2500 (Rs. 25,000). Within twenty-four hours of the riot at Supa, the leading Marwari lender of Kedgaon about fourteen miles to the north of Supa had his stacks burnt down and his house set on fire. During the following days riots occurred in four other villages of Bhimthadi, and were threatened in seventeen more. [In the village of Morgaon a crowd assembled, Vanis were threatened and bonds demanded, violence was prevented by the timely arrival of the police. At Dhond a Vani was severely treated because he would not give up his bonds, and a large crowd assembled. Five ringleaders were punished. At Ambekhurd two Vauis' houses were forcibly entered, their account books destroyed, and bonds taken away. Six of the ringleaders were punished. In Aligaon about two hundred men from the surrounding villages of Nargaon, Nandgaon, Andhalgaon, Kolgaon, Dolas, and Vadgaon, assembled, headed in some instances by their headmen and village police, and de manded their bonds from the Vanis threatening if they refused to treat them as the Supa Vanis had been treated. The police patel of the village, with the assistance of the Ramoshis Mhars and other well disposed people, dispersed the assembly who threatened the Vanis with another visit. The inhabitants of Vadgaon again collected in numbers and compelled one of the Vanis of their village to give up his bonds, went through his house, broke open the back entrance of the next bouse, illtreated the female Vani owner, compelled her to point out where the bonds were kept, broke open the box, and took the bonds, burning or otherwise destroying papers worth £100 to £1200 (Rs. 1000-12,000). A similar assembly at Mandgaon took possession of bonds of the value of £600 (Rs. 6000) and about half of them were destroyed. At Rahu a Marwari who had been incessantly threatened fled to Phulgaon, and was not allowed to remove his property and family. A large stack of fodder belonging to him was destroyed. At Pimpalgaon, the villagers took away bonds from small moneylenders among whom was a Chambhar who had only one bond for £3 10s. (Rs. 35). The police patel on his way to report the matter to the Police Superintendent was stoned. The contagion spread to the neighbouring sub-divisions of Indapur and Purandhar. In Indapur a disturbance, which from the numbers present would have been serious, was averted, as were the riots threatened in the seventeen Supa villages, by the promptitude of the police. A detachment of Native Infantry arrived at Supa, the police were relieved and available for other duty, and order was quickly restored.

About the same time riots occurred in Sirur, The first act of violence was committed at Navra, where a Marwari, who had left the village for safety, was mobbed and prevented from moving his property. An uncle

of this Marwari some two years before had been murdered by his debtors. Other Sirur villages followed the example of Navra. [At Dharure the houses of two Marwaris were simultaneously attacked, bonds worth £1200 (Rs. 12,000) were forcibly taken, and the owners were stoned. One old Marwari had his leg broken. He was confined in his house and the house set on fire. He was saved but his and the other Marwaris' houses were burnt. The chief constable was also threatened and was not allowed to carry on the work of investigation. This shows that everywhere the same influences had brought the villagers to the same readiness to resort to force. Subsequent inquiries leave no doubt that the rioters at Supa had the sympathy and countenance of some influential persons of their village, and the presence of these persons may perhaps account for the first occurrence of open violence at Supa. But the condition of the villages through the whole affected area was such that even had Supa not taken the initiative, some other places would doubtless-have done so. The combustible elements were everywhere ready; design, mistake, or accident would have surely supplied the spark to ignite them. The ringleaders generally belonged to the cultivating classes, their only object being, to escape from the hands of the moneylenders. When a riot began all the bad characters in the village took part in hopes of plunder.] In fifteen Sirur and three Haveli villages riots either broke out or were threatened. [While these disturbances were going on in Poona similar outbreaks occurred in the neighbouring district of Ahmadnagar, During the fortnight following the Supa riot on the 0 2th of May riots took place in eleven villages of Shrigonda, six of Parner, four of Nagar, and one of Karjat and besides actual rioting there were numerous gatherings which were prevented from coming to violence by the timely arrival of the police or military. A detachment of Native Infantry was moved to Shrigonda and parties of the Poona Horse were active in patrolling the villages in the west with in reach of their headquarters at Sirur. The regiment of Poona Horse whose head-quarters are at Sirur supplied parties to help the Magistrate and police in restoring and maintaining order. More or less serious disturbances took place in five villages of Bhimthadi and six villages of Sirur. They were threatened but averted by the arrival of the police in seventeen villages of Bhimthadi, in ten of Sirur, in one of Indapur, and in three of Haveli. Of 559 persons arrested, 301 were convicted and 258 discharged. Punitive police posts were established in the disturbed villages at the people's expense. The riot at Supa was singular in the wholesale plunder of property and the Damare riot in the murderous assault on the moneylenders. In a few other cases personal violence was used, and in several places stacks of produce belonging to moneylenders were burnt. As a rule the disturbances were marked by

the absence of serious crime. In every case the object of the rioters was to obtain and destroy the bonds and decrees in the possession of their creditors. When bonds were peaceably given the mob did no further mischief. When the moneylender refused or shut his house violence was used to frighten him into surrender or to get possession of the papers. In most places the police interfered during the first stage of assembling and prevented violence. From many villages the Marwari moneylenders fled on the first news of the outbreak. In other villages they opened negotiations with their debtors for a general reduction of their claims, and in some cases propitiated their debtors by easy settlements. In almost every case inquired into, the riot began on hearing that in some neighbouring village bonds had been extorted and that Government approved of the proceeding. Almost the only victims were Marwaris and Gujars. In most villages where Brahman and other castes shared the lending business with Marwaris the Marwaris were alone molested. In some villages where there were no Marwaris, Brahmans were attacked. The last of the connected Beries of outbreaks occurred at Mundhali in Bhimthadi on the 15th of June. Afterwards two isolated cases in Poona showed that the long catalogue of convictions and punishments and the imposition of punitive police posts had repressed not guenched the people's rage. On the 22nd of July seven men of the village of Nimbhat in Bhimtadi, besides robbing papers, cut off the nose of a man who was enforcing a civil decree which had put him in possession of land belonging to one of the men who attacked him. On the 28th of July the villagers of Karhati in Bhimthadi broke into the house of a Marwari moneylender and took a store of grain. The Marwari had refused to advance grain except on terms to which they could not agree. Beside these two cases in Poona, on the 8th of September in the village of Kukrur in the Valva sub-division of Satara more than 100 miles from the nearest disturbed part of Poona, a riotous outrage was committed in all respects similar to the Poona and Ahmadnagar riots. About 100 or more villagers attacked, plundered, and burnt the house of a leading Gnjar moneylender, gathered all the papers and accounts which they found in the house, destroyed them, and dispersed. The cause was declared to be the harsh proceedings of the moneylender against his debtors.]

The most remarkable feature of these disturbances was the small amount of serious crime. A direct appeal to physical force, over a large area, was usually restrained within the limits of a demonstration. The few cases which bear the vindictive spirit usually shown in agrarian disturbances were probably due to the presence of other rioters besides the ordinary Kunbi peasantry. This moderation is in some measure to be attributed to the nature of the movement. It was not so

much a revolt against the oppressor, as an attempt to accomplish a definite and practical object, the disarming of the enemy by taking his weapons, his bonds and accounts. For this purpose a mere demonstration of force was usually enough. Another circumstance which contributed to the moderation of the peasantry was that in many cases the movement was led or shared by the heads of the village. It was doubtless an aggravation of the breach of law that those who should have maintained order contributed to disturb it. Still an assembly of villagers acting under their natural leaders for a definite object was a less dangerous body than a mob of rioters with no responsible head. The chief cause of the moderation was the natural law-abiding spirit of the Kunbi peasantry. In so orderly and peaceful a people such a widespread resort to force proved the reality of their grievances. [Deccan Riota Commission Report, 7.]

Deccan Riots Commission.

That the riots ceased was due not merely to the prompt action of the police and the military, but to the assurance of the civil authorities that complaints should be inquired into and proved grievances redressed. Accordingly in 1875 the Bombay Government appointed a commission to inquire into the causes underlying the outbreak. The members of the commission were Messrs. Richey and Lyon of the Revenue and Judicial branches of the Bombay Civil Service, Mr. Colvin of the Bengal Civil Service, and Rav Bahadur Shambhuprasad Laxmilal a distinguished Gujarati administrator. Subsequently Mr. Carpenter of the Bengal Civil Service took the place of Mr. Colvin whose services were elsewhere required. The Commissioners held inquiries in disturbed parts, recorded the statements of landholders and of lenders, and compiled other evidence obtained on the spot and in the records of Government. Their report, which was submitted to Government in 1876, contained a detailed history of the relations of the Deccan landholders and moneylenders since the beginning of British rule.

The result of the commissioners' inquiries into the relations between moneylenders and husbandmen in the Deccan was that the normal condition of the bulk of the landholders was one of debt. About one-third of the landholders were pressed by debt, averaging about eighteen times their yearly rental and about two-thirds of it secured by mortgage of land. Of the two-thirds who were not embarrassed some were well-to-do. But immediately above the embarrassed was a class with little property to fall back on whom a succession of bad years or a fall in produce prices would plunge in debt. [In twelve villages, of

1876 holders of land, 523 who paid a total yearly rental of Rs. 10,603, were embarrassed with debt. The debt amounted to Rs. 1,94,242 of which Rs. 1,18,009 were on personal security and Rs. 76,233 on mortgage of land. In another 24 villages the number of occupancies held by lenders in the years 1854,1864 and 1874, with their area and the assessment payable at each period, were:

| ITEM. | 1854. | 1864. | 1874. |
|------------|-------|-------|--------|
| Holdings | 164 | 203 | 272 |
| Acres | 4001 | 5292 | 10,075 |
| Assessment | 1924 | 3721 | 7134 |

In noting these figures it must be remembered that during the latter part of the period embraced, there was little unoccupied waste and the increase in lenders' holdings implies a corresponding decrease in the holdings of the cultivating class. It will be observed that the increase in the assessment is greater than the increase in area showing that the better class of land was passing into the lenders' hands, and further that the increase in the number of holdings shows an increase in the number of lenders, Deccan Biota Commission Report, 33. The estate of an average Kunbi landholder, exclusive of his land and its produce, was estimated to have a sale value of little more than £20 (Rs. 200).

The details are: live stock its. 125, tools and vessels Rs. 20, house Rs. 50, and miscellaneous Rs. 20; total Rs. 215. These items are subject to depreciation and imply yearly charges for maintenance and renewal.]

The district lenders belonged to three classes. The first class included small traders and village moneylenders, mostly Marwar and Gujarat Vanis and a few Lingayat and Vaish Vanis and Brahmans chiefly village accountants. These advanced grain for seed and food and money upon pledge, mortgage, and good security. They were specially hateful to the people and on them fell the burden of the 1875 troubles. The second class were the rich bankers or traders of large towns. Among these, besides Gujarat, Lingayat, Marwar, and Vaish Vanis, were many Yajurvedi Deshasth Brahmans. The village accountants or *kulkarnis* who were small moneylenders were generally closely connected with these Brahman bankers. They had also relations with pleaders and to some extent with local officials. They dealt much less in grain advances than the lower class of traders. In the same way as *kulkarnis*

acted as agents to rich pleaders and other moneylending Brahmans so small village Vanis were often the agents of their rich costefellows. The Brahman and Vani lenders who worked through Brahman and Vani village agents were less unpopular than the Marwar lenders. Those who were Brahmans derived some advantage from their caste and community of country and religion. Still as a body they were bad landlords and most intriguing and scheming. The third class consisted of husbandmen who had kept out of debt and were able to make their neighbours small advances in money and grain. They were often grasping and dishonest, but their debtors dealt with them much more on an equality, and community of race and residence not only tended to kindly treatment but brought any unusual villainy under the ban of the public opinion of the caste and village. Most of them were husbandmen and valuable landholders. Husbandmen lenders were sometimes threatened during the 1875 riots but in no case was a lender of this class injured.

A notable feature of the moneylenders' dealings was the system of retail business which reduced even the most trivial transactions to written contracts. The invariable use of bonds was probably partly due to the precarious character of the landholder's assets and partly to the uncertainty of the climate. The terms on which the moneylenders dealt were that every debit was to be protected by a bond giving them unlimited powers of recovery and that the credit side was to be left to their own honesty. Account current was hardly known. There was usually a debt of long standing, probably inherited, the interest of which made a yearly debit. Besides this debit there were the give-andtake or devahev dealings, in which the debtor delivered his produce, or as much produce as he was forced to deliver, to his creditor and the creditor supplied the debtor's needs, clothing, assessment, seed, food, and cash for miscellaneous expenses. Every now and then a larger item appeared on either side, a standing crop was perhaps sold after a valuation either to the creditor himself or another, the creditor in the latter case getting the price paid, or a pair of bullocks or a cow and calf were given to the creditor on account. Against this the debtor drew occasionally a considerable sum for a marriage, for the purchase of land or bullocks or a standing crop, or for digging a well. Bonds were continually passed as the account went on. Sometimes a bond was taken as a deposit and the debtor drew against it, or a small transaction was included in a larger bond and the debtor was to draw against the balance. Marwari moneylenders kept accounts, but often only in the form of a memorandum book. Moneylenders who did not belong to the trading classes often kept no accounts. With all the bond was the recognized record of the transactions. Bonds were never or

very rarely made for large amounts. When a large debt was to be reduced to paper, several bonds were drawn. Thus a debt of £17 10s. (Rs. 175) would be represented by one bond of £10 (Rs. 100), another of £5 (Rs. 50), and a third of £2 10s. (Rs. 25). The chief object of this arrangement was that the moneylender might get a decree without much cost. A decree on the £2 10s. (Rs. 25) bond usually gave him power enough to force his debtor to meet demands on account of the entire debt of £17 10s. (Rs. 175). Again, interest usually ceased when a bond was turned into a decree, so that it was not to the bondholder's advantage to take a decree to meet the whole debt. When the debt had reached an amount to meet which the borrower's personal security was not sufficient, it was commonly converted into a land mortgage. Where the debtor owned a well or a share in a well the well or share together with the watered land were preferred as security. Sometimes the joint security of another landholder was added to the personal bond. In such cases the joint surety usually had a direct interest in the loan, or as a near relation helped the debtor, or his security was obtained by private arrangement. Often before the mortgage of his land the debtor's house, bullocks, crops, and carts, or other movable property were mortgaged. When bullocks were mortgaged, the debtor had to pay for their hire which became the interest of the loan. When the mortgage of land was completed, the lender almost always began by leaving the debtor in occupation as tenant, and a form of mortgage existed in which the profits of the land were all that was mortgaged as the tenant was left in possession without any transfer or acknowledgment of the mortgagee's right, so long as the mortgager delivered the produce yearly. [The right of occupancy was not transferred to the creditor in the Government books as was generally the case in the neighbouring district of Ahmadnagar.] If the debtor failed to deliver the produce the mortgagee usually took possession. Sometimes the produce of the land was made to represent the interest of the loan; more usually a specific rate of interest was cited in the bond. The debtor held as tenant on every variety of terms and conditions. [These were often reduced to writing. They were either leases, deeds of partnership, or simple contracts in which a rent in money was stipulated. It would often be found that the rate was adjusted to cover the interest agreed on in the mortgage bond. As the amount of capital in the mortgage bond was usually more than the value of the land at twelve per cent interest, and as the rate of interest in the bond was usually at least eighteen per cent, it followed that the land would not yield the required sum and thus the mortgagee constantly received the full actual rent of the land and in addition exacted bonds for the yearly deficit. The rent was often settled in kind and the rates were mainly

determined by the power of the mortgagee to grind his tenant. One mortgagee's tenant in his statement to the Deccan Riots Commissioners used the following words, ' I till the land, but I have no right to take for my use any of the produce.' Doubtless under the hardest conditions the tenant who was bound to hand over the entire produce of a field to his creditor did take something. On the other hand much land was held by mortgagee's tenants at the usual rental terms, that is, half of the grass produce of dry and one-third of watered land, the mortgagee paying the assessment, and the seed and expenses being shared in the proportion of their respective interests in the crop. When the tenant paid in kind, his payments might exceed the amount of interest stipulated in the mortgage bond; but he kept no account of such payments and was generally found to have no connection of his responsibility for accounts. As the responsibility could not be enforced by the landholder it practically did not exist. Doubtless most mortgagee landlords had an account, but the landholder could not get it without going to court which to him was out of the question. Deccan Biota Commission Report, 62.] Another form of mortgage, which was usually entered into only when the parties had come to a final settlement, was the transfer of the land to be enjoyed for a certain number of years in satisfaction of the debt. When an agreement of this kind was made it usually happened that before the period ended, the mortgagee had established claims giving him a further lien on the land. A similar method of settlement by an instalment bond was gladly accepted by a debtor, but here again the failure to pay one instalment in a bad year usually gave the debt a fresh departure. The mortgagee landlord usually allowed the landholder to till the mortgaged land, and so long as the holder was left in this relation to his fields he accepted his fate without much bitterness. It often happened that owing to default in payment by the tenant, or to better terms being offered by another, or to the tenant's cattle and field-tools being sold in execution of decree, it ceased to be the interest of the mortgagee to leave the cultivation in the tenant's hands and the land was taken from him. Besides the security of the landholder's personal credit, stock, movables, house, lands, and the joint security of surety, the labour of the borrower was also mortgaged to the lender. The terms of this form of bond were that the debtor was to serve the creditor and that his wages were to be credited at the end of the year, or that a certain sum was to be worked out by service to the lender for a certain period. Sometimes the wife's labour was also included in the bond. The labour was given either in house or field service. The labourer got his food and clothing, and a monthly deduction of 2s. to 4s. (Rs. 1-2) was made from the debt. The labourer's whole time was at the lender's disposal. [Dr. Coats (Trans.

Bom. Lit. Soc. III. 239) has the following notice of labour mortgage at Loni in 1820. In return for an advance of money for a marriage, servants sometimes bind themselves to Berve their masters for a term of years for clothes, board, and lodging. About six years would be wanted to clear an advance of £10 (Rs. 100).]

The chief complaints made against moneylenders were that bonds usually ran at excessive interest; [In many cases in which the less intelligent husbandmen were the borrowers, the interest charged was so excessive as to amount to fraud and oppression. I that at every stage the borrower was defrauded by the lender and especially by the petty usurer; that the lender often declined to give accounts, refused receipts, omitted to credit payments or give interest on payments, and declined to carry out such stipulations in the bond as were in the borrower's favour. Forgery was sometimes practised and the landholder from his ignorance was unable to prevent his creditor from taking advantage of these nefarious practices. Another way in which the landholder suffered was by the reduction, under the Act of 1859, of the time during which money bonds were current to the small period of three years. A new bond must be entered into every three years and the interest being added up and a new account struck the amount of compound interest was swelled eventually to a very large sum. In addition to the compound interest the creditor usually took the opportunity of renewing a bond to extort fresh and burdensome stipulations under threats of suing his debtor in court, all of which added to the total of the debt. [In the minute of Mr. Shambhuprasad who sat on the Commission of 1875, a case is cited in which an advance of £1 (Rs. 10) was made in 1863. Sums amounting to £11 (Rs. 110) were paid from time to time, and, at the end of ten years, £22 (Rs. 220) were still due. Bombay Government Selection CLVII. 13.]

Besides these usual complaints of the cultivator against the moneylender he had the following grievances. When the cultivator was sued in court, at the outset he was met with fraud. From the creditor's influence over the subordinates of the court no summons was served and the court being told that the summons had been served gave a decree against the debtor in his absence. The distance he had to travel to a court prevented a defendant attending. [In the majority of cases it was alleged that the eason why the defendant did not appear was that he had no defence to make, that he had no money to pay for a pleader, that he was unwilling to lose the time involved in defending a suit, or that he was afraid of the subsequent vengeance of the creditor whom he had opposed.] The defence of a suit took longer than the

defendant could spare, and the judge had not time to go into the right of the defendant's case and make up to him for the want of counsel. The high costs of suits was another reason why the defendants declined to contest their cases. It was after the lender had gained his decree that the borrower suffered most. He might be arrested and imprisoned. Civil imprisonment was peculiarly open to abuse and was often made use of to impose on prisoners more severe terms than could otherwise be obtained. The next hardship to the landholding debtor was that movable property of all kinds and land could be sold without reserve. In spite of the harshness and the dishonesty of many of its members, the class of moneylenders was of the greatest service to the landholders. They helped them to meet their special family expenses and to enlarge their holdings and increase their stock, they tided them over seasons of scarcity and enabled them to pay their rents.

The Commissioners' chief recommendations were, with regard to the husbandmen's poverty, to improve agriculture by irrigation and to modify the Land Improvement Act so as to make the help which Government was ready to give more available to the husbandman; with regard to the revenue system, they advised the adjusting of the Government demand to the husbandmen's capacity and whew the assessment was enhanced that the increase should be gradual; with regard to the defects of the law they advised that a Bill should be passed to prevent frauds, and to protect husbandmen in the first stages of debt before the creditor had gone to the civil court. The chief provisions of the proposed Bill were the appointment of public notaries and the enforcing of the delivery of receipts and accounts by creditors. To meet hardships incurred by the debtor through the excessive powers given to the decree-holder, the absence of all protection to the insolvent debtor, and the use of decrees as a threat, the Commissioners advised the passing of another Bill, the chief provisions of which were the abolition of imprisonment for debt, the exemption of necessaries from sale in execution, the protection of the judgmentdebtor from the wrong use of a decree, making the decree the end of the suit, and the limitation of decrees. The Commissioners also recommended certain changes in the conduct of judicial business, the establishment of village courts, and the passing of an Insolvency Act.

New Civil Procedure Code (Act X of 1877).

Meanwhile the relation of the debtor and the creditor somewhat improved. The 1874-75 disturbances had opened the eyes of the. creditors to the danger of treating their debtors too harshly, and the

famine of 1876-77 turned the thoughts both of creditors and debtors into other channels. A new Civil Procedure Code (Act X. of 1877) came into force in October 1877, Section 266 of the Code made the important change of exempting from attachment or sale in execution of decrees, tools, implements of husbandry, cattle enough to enable a judgment-debtor to earn his livelihood as a husbandman, and the materials of houses and other buildings belonging to and occupied by agriculturists. Under section 326 the Collector of the district is empowered to represent to the court that the public sale of land which has been attached in execution of a decree is objectionable and that satisfaction of the decree may be made by the temporary alienation or management of the land; that, therefore, the court may authorize the Collector to provide for the satisfaction of the decree in the manner which he recommends. Section 320 enables the local Government, with the sanction of the Governor General in Council, to declare that in any local area the execution of decrees of any particular kind in which the sale of land is involved, shall be transferred to the Collector, and sections 321 to 325 invest the Collector with powers to manage or to deal with the land as if it were his own and to adopt one or more of several modes of satisfying the decree without selling the land except in the last resort. [Poona was one of four districts to which this section] was immediately, applied the other districts were Ahmadnagar, Sholapur, and Satara, By section 336, the local Government may direct that every judgment-debtor brought before a court in arrest in execution of a decree for money shall be informed by the court that he may apply to be declared insolvent. Section 358 shows special consideration to the debtor if the debt is less than £20 (Rs. 200). Thus in several respects the new code improved the debtor's position. To place the relations of the debtor and the creditor on a better footing it was deemed necessary, To provide some safeguard against the moneylenders committing frauds in their accounts and obtaining from ignorant peasants bonds for larger amounts than were actually paid to or due from them; As far as possible to arrange disputes by conciliation, to increase the number of courts, and so to simplify and cheapen justice that husbandmen might defend suits: To insist that in suits against landholders the court shall in certain cases of its own motion investigate the entire history of the transactions between the parties and do substantial justice between them; and To restrict the sale of the debtors' and in execution of a decree and to provide an insolvency procedare more liberal to the debtor than that of the Code of Civil procedure.

Deccan Agriculturists Relief Act.

To secure these objects the Deccan Agriculturists' Relief Act (Act XVII. of 1879) was passed by the Governor-General's Council. The principal object of legislation was to restore the dealings between lender and borrower to an equitable basis. The aid of the Government is withheld in the case of demands manifestly unfair and extortionate, and is rendered more speedy and effective in the recovery of just dues. As far as possible, credit is restricted within the limits set by the prospects of the certain recovery of the value of the amount lent. The first considerable change introduced by the Act was the appointment of village registrars before whom every instrument to which a landholder is a party must be registered before it can be used against him as evidence of his indebtedness. At first most of the persons appointed as village registrars were the hereditary village accountants of the larger villages, but, as their work was not satisfactory, special registrars have been substituted each being in charge of a circle of about twenty villages. The second notable point in the Act is the appointment of sixty-two conciliators, men of influence before whom the creditor must bring his claim before he can file a suit in the regular courts, and whose duty it is to assist in or bring about the compromise of money disputes. To compel litigants to have recourse to these conciliators it is enacted that a claim for money against a landholder is not to be entertained by the; Civil Courts unless accompanied by a conciliator's certificate that he has attempted to effect a compromise. Such compromises are filed in the records of the Civil Courts and have the force of decrees. The next measure by increasing their number brought the courts more with in reach of the people and made them less technical and less costly. The result is that only a few villages are more than ten miles distant from a civil court. Village munsiffs were also appointed and invested with summary powers extending to suits for the recovery of amounts not exceeding £1 (Rs. 10). Twenty three village munsiffs' appointments were made, and the individuals are pronounced fairly competent. The office was purely honorary. They disposed of a large number of suits, but as few of these were brought by or against landholders their institution afforded little or no relief to the cultivating classes. A special Judge and assistant judge and special subordinate judges have been appointed for the Poona, Satara Sholapur, and Ahmadnagar districts to inspect and revise the work of the subordinate establishments instead of the ordinary right of appeal which has been withdrawn. Professional legal advisers have been excluded from the courts of the conciliators and village munsiffs and also from the courts of the subordinate judges when the subjectmatter of a suit is less than £10 (Rs. 100) in value, unless for special reasons professional assistance seems to the subordinate judge to be necessary. This provision does not seen to have proved popular, in the

absence of the agent or vakil frequent personal attendance is required of the parties, and the waste of time and money is said to no greater than the cost of retaining counsel. A very important section makes it binding on the court to inquire into the history and merits of every claim brought before it with a view to testing its good faith. This provision is unpopular with the lender and is believed to have greatly influenced the number of suit instituted since the Act came into operation. Interest, too, is not to be awarded to an amount exceeding that of the capital debt as ascertained on taking the account. The person of the agriculturist is exempted from arrest and imprisonment, nor can his land be attached or sold unless it has been specially mortgaged for the repayment of the debt in question. If the court so directs, the land may be made over for a period to the management of the chief authority of the district with a view to the liquidation of the debt. Again the limitation in respect of money suits has been extended, payment of amounts decreed may be ordered by instalments, and a landholder can now be declared insolvent and be discharged summarily when his debts do not exceed £5 (Rs. 50), and in other cases after a procedure specified in the Act. The insolvency chapter continues wholly inoperative. The indifference of the debtor cannot be altogether explained on the ground of religious scruples or the fear of the loss of credit and social status. The Relief Act has conferred so many other privileges and immunities on the indebted landholders that the necessity of having resort to the extreme measure of seeking relief by insolvency has not made itself so much felt as might have been expected. The debtor's freedom from arrest and imprisonment, the exemption of his immovable unmortgaged property from attachment and sale, the large reductions in the amount of his debt effected by conciliation and the procedure under the Act, the privilege of paying the balance by easy instalments, and the consequent cessation from the perpetual worrying of his creditors, have given such real and substantial relief that the husbandmen sometimes declare that they want no more. They regard the resort to insolvency as a step into the unknown. No provision of the Act is more valued by the people than the rule which admits of a decree being paid by instalments. Whether a claim is admitted or contested the landholder rarely fails to put in a plea praying that the amount found due may be made payable by instalments. At the same time the circumstances of the debtor are inquired into, and instalments are not allowed indiscriminately.

The Special Judge believes (1882-83) that the Relief Act has done, and is doing, a vast amount of good. It has succeeded in effecting many of its principal objects. It has checked the downward progress of the

landholders, and given them, what they so sorely needed, an interval of repose after a trying period of distress and famine. The landholding classes have never been so contented as they are at present (1882-83). They can reap the fruit of their labour; they are protected from the constant harassing to which they wore formerly subject; they no longer live in ceaseless terror of rack-renting eviction and imprisonment. When the worst comes they are sure of obtaining a fair and patient hearing in the courts, and, if they have a good defence, they are in a better position to prove it. They are allowed to pay what is justly due by them in instalments, and this privilege they seem to value more highly than any other granted by the Act. The courts are now more accessible, more absolute, less technical, less slow, and less costly. The provisions of the Act have tended to soften the extreme severity with which the law pressed on debtors, and the judges are able to modify the contracts in an equitable spirit. The moneylenders complain of the Act, and middlemen lenders have suffered and are likely to suffer; nor can it be denied that to some extent the Act has checked the old system of agricultural loans. The husbandman's credit has been greatly curtailed. Still this is a gain as the system under which the husbandman used to obtain advances had no elements of soundness. The husbandman was not an independent borrower; borrowing was a necessity to him arising from the very faults of the system. The change has been wrought, not by the power given to the courts of going behind the bond, or of granting instalments, but by the provisions which exempt the landholder's person from arrest, and his necessaries and his immovable property from attachment. The powers which the creditor enjoyed under the old law were used, not to realize his loan, but to prolong indefinitely a state of indebtedness which enabled him to turn his debtor and his debtors' descendants into his family serfs. A debt was a lasting and in the long run a safe and paying investment. The security on which the greedy middleman used to lend was the knowledge, that, with the aid of the rigid mechanism of the civil courts, he could gain and keep an hereditary hold upon the labour of his debtor and his debtor's family and grind them at his will. Hence it was that the creditors used to pay their debtors' assessment and help to keep them alive by doles of food daring times of distress. They were actuated by self-interest not by benevolence. They could not suffer their investments to perish. The Relief Act has caused a great change. By withdrawing the special facilities which creditors enjoyed for putting all kinds of pressure on the debtor it has made the debtors more independent and self-reliant and the creditor less ready to make advances. As the husbandman can no longer depend on the moneylender he has for the necessaries of life adopted a new rule of conduct, the consequence of which is that not only are moneylenders

more disinclined to lend, but that the same necessity for borrowing no longer exists. Formerly the husbandman when his crops were reaped thrashed and garnered, carted them in lump to his creditor's house or shop. The creditor took them over and entered in his books very much what value he pleased, generally in satisfaction of arrears of interest. As he had parted with all his crop, the husbandman had to borrow fresh sums in cash or grain to meet the instalments of land revenue, for his own support, and for seed. For each fresh advance ho had to execute a fresh bond. Now the husbandman carries the produce of his field to his own house, and, keeping what he thinks sufficient for his; household purposes, sells the rest in the best market he can find, He has learnt in a measure to be thrifty and provident. He is no longer beset by the necessity of borrowing at every turn. For months beforehand the husbandman now begins to make preparations for the payment of the assessment by selling grass, butter, goats and cows, and last of all their grain. This seems to be the chief reason why loans to the poorer classes of landholders have so greatly diminished. This is the class who were formerly wholly dependent on the moneylenders. Now they are obliged, and somehow manage, to shift for themselves. The solvent and independent, landholders form a class by themselves; the Act has improved their condition without in the least impairing their credit. Men of this class, if they have a character for honesty, can borrow money for necessary purposes at reasonable interest, and their borrowing powers have not been injuriously affected. To this class, unfortunately, but a small proportion of the people belong. The bulk of the landholders consists of men who have not, and who long have ceased to have, any credit in the true sense of the word. Though nominally perhaps owners of their land, they have actually been the rack-rented tenants of the village moneylender to whom belonged the fruits of their toil. If the moneylender can no longer squeeze them, he will no longer help them. Hence the dislocation of the old relations, and the fall in loans to husbandmen. The change is a change for the better. The question arises whether the general body of landholders can get on without borrowing. Experience seems to show that they can and do get on. Since 1879, there have been no unusual difficulties in realizing the Government land revenue; there has been no large or sudden throwing up of land; there have been no extensive transfers, either by revenue, judicial, or private sales. The landholders seem to no better off than they were before the Relief Act was passed. The decrease in fresh loans has led to a diminution of indebtedness; old debts are being gradually worked off, compromised, or barred by time; a good beginning has been made towards clearing off the load of debt; the people as a rule, are sensible of the change, and in consequence show a growing desire to practise thrift and to combine for purposes of mutual help. Many experienced revenue and judicial officers hold that, if the present conditions remain unchanged, a few more years will see the landholders to a great extent free from debt and able to stand on their own legs. At the same time it is to be remembered that the last three seasons have been seasons of average prosperity and that the Act has not yet stood the test of a failure of crops. Matters are still in a transition state, and during a transition period it would be unreasonable to expect the Act to endure a severe strain. Once freed from debt the landholder will be able to get on without borrowing in ordinary years. In periods of scarcity or distress he will hove to look to Government for help, unless in the meantime the relations of the lending and the borrowing classes are placed on a more rational footing than that on which they rested in times past. The Relief Act has done much to restore solvency to the most important class in the district with the least possible disturbance of the relations between capital and labour.

SLAVES.

Under the Peshwas slavery was an acknowledged institution. In 1819 in the township of Loni in a population of 557 Dr. Coats found eighteen slaves, eight men seven women and three girls. [Trans. Bombay Lit. Soc, III. 194, 239. See also Steele's Hindus Laws and Customs.] One of the families though not formally free had practically been set free by its master in reward for good conduct. This family lived in a separate house and tilled on their own account. The other slaves lived in their masters' houses. All were well treated. They were clad and fed in the same way as the members of their masters' families; almost the only difference was that they ate by themselves. If they behaved well, they had pocket-money given them on holidays, and their masters paid £5 to £6 (Rs. 50-60) to meet their wedding expenses. The men worked in the fields and the women helped their mistresses. Some of the girls were their master's concubines. All of the eighteen slaves were homeborn; the mothers of some had been brought from Hindustan and the Karnatak, Slaves were sometimes set free as a religious act, sometimes in reward for good conduct, Sometimes because they were burdensome. A freed slave was called a Shinda; they were looked down on, and people did not marry with them. Traffic in slaves was thought disreputable and was uncommon. Boys were rarely brought to market. Sales of girls were less uncommon. If beautiful they were bought as mistresses or by courtezans, the price varying from £10 to £50 (Rs. 100-500). Plain girls were bought as servants in Brahman houses.

In 1821, the Collector Captain Robertson, reported that the only form of slavery in Poona was domestic slavery. A person became a slave who was sold in infancy by his parents, or who was kidnapped by Lamans and thieves. Few slaves knew their kinspeople or were related to the people of the surrounding country. Children kidnapped in distant provinces were brought to Poona for sale and Poona children stolen or sold by their parents in times of famine were carried to other parts of India. [East India Papers, IV. 589-90. In a country like India subject to severe famines the relief which was afforded by the inhabitants of a neighbouring province purchasing the children of famished parents, greatly counterbalanced the loss of freedom, especially as the state of slavery was soothed by kind treatment and regard. A man also became a slave to his creditor when he could not pay his debt, but this happened only when the debtor was a Kunbi or a Dhangar and the creditora Brahman. Only three instances came to Captain Robertson's knowledge in which creditors had chosen to enslave their debtors. [In 1821 many debtors could not discharge their obligations but the creditors almost never wanted to make their debtors slaves. East India Papers, IV, 589-90. Slaves were treated with great kindness. The general feeling was that no one should ill use a slave. Cases sometimes happened in which slaves were severely beaten by their masters or had their powers of work overtaxed. In such cases the Hindu law officers generally recommended that the slaves should be set free. When male slaves grew to manhood their masters often set them free, but female slaves were seldom freed, and their children were also slaves. The slaves, especially the females, when they lost their freedom in infancy, became attached to their mode of life and had no wish to be free. They were generally fond of their master's family, or of some members of the family, and would have felt more pain in being separated from them than pleasure in gaining their liberty. Instances occurred in which female slaves complained of the cruelty of one member of the family, but when offered their liberty refused to leave the family either because of their love for other members of it or because they feared to be set adrift in the world.

WAGES.

Fifty years ago the daily wages of adult male city labourers ranged from $2\frac{1}{2}d$. to 3d. ($1\frac{1}{2}-2$ as.), of field labourers from $1\frac{1}{2}d$. to $2\frac{1}{4}d$. (1- $1\frac{1}{2}$ as.), and of the artisan classes from $4\frac{1}{2}d$. to 9d. (3-6 as). The wages of women were two-thirds and of children one-half of men's wages. Between 1862 and 1869, owing to the American war and the construction of the railway and large Government and private buildings in Poona, wages considerably rose, being half as much again as at

present. At present (1883) the daily wages of town and city labourers range from $4\frac{1}{2}d$. to 6d. (3-4 as.); of field labourers from 3d. to $4\frac{1}{2}d$. (2-3 as.); and of skilled artisans from 9d. to 1s. 3d. (6-10 as.) for bricklayers, 1s. to 1s. 6d. (8-12 as.) for carpenters and masons, and 6d. to 1s. (4-8 as.) for tailors. Cart-hire is 1s. 9 (14 as.) and camel hire 1s. (8 as.) a day. Field labour is partly paid in kind and partly in coin; town labourers are paid wholly in coin. In villages, wages are paid daily, and in towns by the week, fortnight, or month. Except field labour which is chiefly required from August to March, labour, both skilled and unskilled, is in greatest demand daring the fair season, that is from January to June. The demand for unskilled or cooly labour in Poona city is greater than it used to be.

PRICES.

The oldest available produce prices are for twenty-nine years of scarcity which happened daring the forty-eight years ending 1810. [Lieut.-Col. A.. T. Etheridge's Report on Past Famines (1868) Appendix D.] During these twenty-nine years of high prices the rupee price of rice varied from forty pounds in 1788 to five pounds in 1804, of *bajri* from fifty-six in 1788 to nine in 1804, and *of jvari* from fifty-six in 1788 to seven in 1804. The details are:

| ARTICLE. | 1763. | 1765. | 1770. | 1772. | 1773. | 1776. | 1777. | 1778. |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| Rice | 36 | 20 | 20 | 34 | 23 | 34 | 32 | 32 |
| Bajri | 40 | 28 | 32 | 35 | 44 | 40 | 44 | 44 |
| Jvari | | | | 1 | 52 | 48 | 48 | 48 |
| Wheat | 21 | 23 | 56 | 22 | 26 | 36 | 40 | 32 |
| Tur | 16 | 30 | 16 | I | 40 | 32 | 32 | 38 |
| Gram | 21 | 24 | 10 | 37½ | 33 | | 24 | 24 |

| ARTICLE. | 1879. | 1781. | 1786. | 1787. | 1788. | 1789. | 1791 |
|----------|-------|-------|-------|-------|-------|-------|------|
| Rice | 30 | 32 | | 23 | 40 | 36 | 26 |
| Bajri | 36 | 54 | 50 | 48 | 56 | 44 | 32 |

| Jvari | 44 | 56 | 58 | 48 | 56 | 54 | 48 |
|-------|----|----|----|----|----|----|----|
| | 37 | 50 | 42 | 22 | 48 | 28 | 22 |
| Tur | 40 | 46 | 52 | 24 | 26 | 32 | 24 |
| Gram | 42 | 38 | 44 | 48 | 20 | 18 | |

| ARTICLE. | 1792 | 1793 | 1798 | 1799 | 1800 | 1802 | 1803 | 1804 | 1805 | 1806 | 1807 | 1808 | 1809 | 1810 |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Rice | 8 | 9 | 36 | 40 | 24 | 20 | 8 | 5 | 14 | 14 | 14 | 32 | 32 | 32 |
| Bajri | 7 | I | | I | 36 | 28 | 12 | 9 | 20 | 44 | | I | | |
| Jvari | 8 | I | | I | 48 | 29 | 12 | 7 | 12 | 20 | | I | | |
| Wheat | | 8 | 20 | 24 | 18 | 19 | 8 | 5 | 12 | 19½ | 25 | 32 | 32 | 44 |
| Tur | 6 | 9 | 17 | 20 | 24 | | 8 | 31/2 | 10 | 16 | 20 | 32 | 24 | 18 |
| Gram | | 8 | 16 | 16 | 24 | 32 | 10 | 91/2 | 13 | 20 | 26 | 28 | 29 | 20 |

During the twenty-nine years ending 1837 the prices of *jvari* and bajri are available only for Indapur. During this period, except a slight rise in 1811 and 1810, prices gradually fell from 48 pounds of *jvari* and 59 pounds of bajri in 1809 to 97 pounds of jvari and 80 pounds of bajri in 1817. In 1818 there was a considerable and in 1819 there was a still greater rise in produce prices to thirty-four pounds for jvari and thirtyone pounds for bajri, from an average of fifty-six pounds for jvari and fifty-five pounds for bajri during the ten years ending 1817. In 1820 the spread of tillage which followed the establishment of order, again brought down prices till in 1824 *jvari* was sold at 73½ pounds the rupee and bajri at forty-six pounds. In the famine year of 1824-25 jvari rose to twenty-five pounds. In 1826 and 1827 prices fell to eighty-eight and 128 pounds for *jvari* and sixty-eight and sixty-four pounds for bajri. They rose slightly in 1828, and in 1829 again fell to 130 pounds for *jvari* and 136 for *bajri*. In 1830 and 1831 prices rose slightly and in 1832 once more fell to 120 pounds for ivari and to seventy for bajri. This terrible cheapness of grain reduced the husbandmen to poverty and caused Government very great loss of revenue. Though the year 1833 is remembered as a year of scarcity *jvari* did not rise above forty-six pounds. The details are:

Indapur Prices in Pounds the Rupee. 1800-1837.

| ARTICLE. | 1809. | 1810. | 1811. | 1812. | 1813. | 1814. | 1815. | 1816. | 1817. | AVER- AGE. |
|----------|-------|-------|-------|-------|-------|--------------------|-------|-----------------|-------|---------------|
| Jvari | 48 | 48 | 44 | 51 | 54 | 50 | 67 | 52 | 97 | 56 |
| Bajri | 59 | 40 | 37½ | 431/2 | 46 | 64 | 61 | 72 | 80 | 55 |
| | | | | | | | | | | |
| | 1818. | 1819. | 1820. | 1821. | 1822. | 1823. | 1824. | 1825. Famine | 1826. | 1827 |
| Jvari | 48 | 34 | 39 | 64 | 64 | 64 | 73½ | 26 | 88 | 123 |
| Bajri | 32 | 31 | | 32 | | 48 | 46 | | 68 | 64 |
| | | | | | | | | | | |
| | 1829. | 1829. | 1830. | 1831. | 1832. | 1833. Scarcity. | 1834. | 1835. | 1836. | 1837. |
| Jvari | 64 | 160 | 02 | 80 | 120 | 40 | 92 | 96 | 76 | 132 |
| Bajri | | 136 | | 77 | 70 | 72 | 68 | 88 | | 98 |

From 1838-39 to 1882 prices are available for several places in the district.

The forty-six years ending 1882 may be divided into four periods. The first period includes the twelve years ending 1849-50. This was a time of low and stationary prices without any more marked changes than were due to the succession of comparatively good and bad harvests. The average rupee price of *jvari* was 108 pounds, almost the same as in 1837-38, a price too low to allow of any increase of wealth in the landholding classes. The second period, the eleven years ending 1860-61, especially the latter part of the period, is one of advancing prices probably due to the opening of roads and in the last years to the beginning of expenditure on railways. During the eleven years ending 1860-61 the average rupee price of *jvari* was seventy-eight pounds and during the last five years seventy pounds. The third period is the ten years ending 1870-71. The first five years of this period was a time of extremely high prices, *jvari* averaging thirty-six pounds the rupee. These high prices were due partly to the abundance of money caused by the inflow of capital during the American war, partly to a succession of bad years. with the close of the American war in 1865 part of the inflow of capital ceased. After 1865, though the inflow of capital connect-ed with the American war ceased, until 1871 the district continued to be enriched by the construction of great public works. To this increase of wealth was added a scarcity of grain caused

by the severe drought of 1866-67, and the partial failures of 1807-68 and of 1870-71. During the five years ending 1870-71 *ivari* varied in rupee price from twenty-seven to sixty-eight and averaged thirty-five pounds. The thirteen years since 1871 may be described as a time of falling prices checked by the famine of 1876-77. The five seasons ending 1876 were years of good harvests and this together with the great reduction in the local expenditure on public works combined to cheapen grain. During the famine of 1876-77, that is from about November 1876 to the close of 1877, jvari varied from thirteen to twenty-five and averaged twenty pounds. Since 1877 large sums have again been spent in or near the district in public works, and the great increase in the trade and prosperity of Bombay have drawn large numbers of workers to Bombay and done much to replace the loss of capital caused by the famine. The seasons have been fair. The price of jvari has varied from eighteen to seventy-six and averaged forty-two pounds. The details are:

Poona Produce Prices in Pounds the Rupee, 1838-39 to 1882-83.

| ARTICLE. | Indpur. | Yevat. | Poona. | Supa. | Talegaon. | Manchar. | | | | | |
|----------|----------|----------|--------|--------|-----------|----------|--|--|--|--|--|
| | | | 18 | 38-39. | <u> </u> | <u> </u> | | | | | |
| Jvari | 134 | | | | | | | | | | |
| Bajri | 60 | | | | | | | | | | |
| | | 1839-40. | | | | | | | | | |
| Jvari | 88 | | | | | | | | | | |
| Bajri | 60 | | | | | | | | | | |
| | | | 184 | 10-41. | | | | | | | |
| Jvari | 128 | | | 88 | | | | | | | |
| Bajri | 88 | | | 62 | | | | | | | |
| | | | 184 | 11-42. | | | | | | | |
| Jvari | 112 | 95 | 60 | 92 | 88 | 92 | | | | | |
| Bajri | 80 | 72 | 48 | 68 | 70 | 84 | | | | | |
| | 1842-43. | | | | | | | | | | |
| Jvari | 136 | 110 | 64 | 92 | 106 | 96 | | | | | |
| Bajri | 84 | 69 | 56 | 70 | 76 | 68 | | | | | |

| | | 1843-44. | | | | | | | | | |
|-------|----------|----------|-----|--------|-----|-----|--|--|--|--|--|
| Jvari | 144 | 128 | 60 | 128 | 134 | 120 | | | | | |
| Bajri | 88 | 96 | 60 | 80 | 78 | 86 | | | | | |
| | | | 184 | 44-45. | | | | | | | |
| Jvari | 120 | 100 | 54 | 89 | 68 | 92 | | | | | |
| Bajri | 72 | 76 | 46 | 73 | 60 | 84 | | | | | |
| | | 1845-46. | | | | | | | | | |
| Jvari | 72 | 50 | 32 | 50½ | 54 | 56 | | | | | |
| Bajri | 50 | 46 | 36 | 461/2 | 46 | 46 | | | | | |
| | | | 184 | 46-47. | | | | | | | |
| Jvari | 30 | 31 | 32 | 31 | 48 | 56 | | | | | |
| Bajri | 26 | 30 | 28 | 301/2 | 46 | 52 | | | | | |
| | 1847-48. | | | | | | | | | | |
| Jvari | 96 | 74 | 62 | 711/2 | 134 | 110 | | | | | |
| Bajri | 64 | 60 | 54 | 60 | 110 | 88 | | | | | |

| ARTICLE. | Indpur. | Yevat. | Poona. | Supa. | Talegaon. | Manchar. | | | | | |
|----------|---------|----------|--------|---------|-----------|----------|--|--|--|--|--|
| | | | 1 | 848-49. | | | | | | | |
| Jvari | 144 | 187 | 110 | 121 | 186 | 144 | | | | | |
| Bajri | 112 | 105 | 82 | 100½ | 132 | 116 | | | | | |
| | | 1849-50. | | | | | | | | | |
| Jvari | 144 | 128 | 94 | 128 | 186 | 116 | | | | | |
| Bajri | 113 | 104 | 74 | 104 | 106 | 84 | | | | | |
| | | | 18 | 50-51. | | | | | | | |
| Jvari | 76 | 72 | 60 | 64 | 68 | 68 | | | | | |
| Bajri | 68 | 75 | 50 | 59 | 54 | 56 | | | | | |
| | | 1851-52. | | | | | | | | | |
| Jvari | 80 | 72 | 66 | 73 | 80 | 68 | | | | | |

| Bajri | 64 | 51 | 50 | 58½ | 68 | 60 | | | | | |
|-------|-----|----------|----|--------|-----|----|--|--|--|--|--|
| | | | 18 | 52-53. | | | | | | | |
| Jvari | 112 | 74 | 74 | 79 | 104 | 58 | | | | | |
| Bajri | 80 | 58 | 58 | 76 | 78 | 84 | | | | | |
| | | | 18 | 53-54. | | | | | | | |
| Jvari | 112 | 114 | 84 | 107 | 70 | 60 | | | | | |
| Bajri | 72 | 89 | 72 | 80 | 52 | 54 | | | | | |
| | | 1854-55. | | | | | | | | | |
| Jvari | 58 | 55 | 50 | 50 | 46 | 52 | | | | | |
| Bajri | 52 | 46 | 44 | 47 | 44 | 46 | | | | | |
| | | | 18 | 55-56. | | | | | | | |
| Jvari | 64 | 80 | 56 | 61½ | 78 | 48 | | | | | |
| Bajri | 58 | 62 | 50 | 56 | 70 | 44 | | | | | |
| | | | 18 | 56-57. | | | | | | | |
| Jvari | 64 | 52 | 50 | 45 | 62 | 68 | | | | | |
| Bajri | 56 | 48 | 42 | 40 | 52 | 60 | | | | | |
| | | 1857-58. | | | | | | | | | |
| Jvari | 78 | 68 | 52 | 57 | 62 | 60 | | | | | |
| Bajri | 74 | 54 | 46 | 481/2 | 54 | 52 | | | | | |

| ARTICLE. | Indpur. | Yevat. | Poona. | Supa. | Talegaon. | Manchar. | | | | | | |
|----------|---------|----------|--------|--------|-----------|----------|--|--|--|--|--|--|
| | | 1858-59. | | | | | | | | | | |
| Jvari | 64 | 52 | 54 | 52 | 74 | 70 | | | | | | |
| Bajri | 36 | 42 | 46 | 42 | 58 | 62 | | | | | | |
| | | | | | | | | | | | | |
| | | | 18 | 59-60. | | | | | | | | |
| Jvari | 78 | 80 | 68 | 77 | 114 | 88 | | | | | | |
| Bajri | 62 | 65 | 50 | 64 | 80 | 68 | | | | | | |
| | | | • | | • | | | | | | | |

| | 1860-61. | | | | | | |
|-------|---|----|----|--------|----|----|--|
| Jvari | 66 | 73 | 52 | 72 | 86 | 68 | |
| Bajri | 46 | 56 | 42 | 53 | 52 | 54 | |
| | 1861-62. | | | | | | |
| Jvari | 54 | 60 | 52 | 57 | 56 | 58 | |
| Bajri | 38 | 57 | 38 | 44 | 46 | 46 | |
| | | | 18 | 62-63. | | | |
| Jvari | 32 | 45 | 40 | 38 | 30 | 34 | |
| Bajri | 32 | 36 | 30 | 30 | 26 | 30 | |
| | | | 18 | 63-64. | | | |
| Jvari | 26 | 31 | 22 | 27 | 30 | 32 | |
| Bajri | 24 | 20 | 18 | 20 | 26 | 28 | |
| | 1064.5- | | | | | | |
| | | T | 1 | 64-65. | | | |
| Jvari | 32 | 22 | 24 | 24 | 24 | 26 | |
| Bajri | 28 | 21 | 20 | 201/2 | 20 | 20 | |
| | | | 18 | 65-66. | | | |
| Jvari | 36 | 32 | 26 | 35 | 54 | 46 | |
| Bajri | 30 | 24 | 22 | 231/2 | 40 | 34 | |
| | 1866-67. | | | | | | |
| Jvari | 44 36 27½ 32 48 | | | | | | |
| Bajri | | 39 | 32 | 28 | 30 | 38 | |
| | , | | | | | | |
| | 1867-68. | | | | | | |
| Jvari | | 28 | 26 | 28 | 40 | 38 | |
| Bajri | | 24 | 22 | 26 | 32 | 24 | |

Poona Produce Prices in Pounds the Rupee, 1838-39 to 1882-83—continued.

| ARTICLE. | Indapur. | Yevat. | Poona | Supa. | Telegaon. | Manchar. | |
|----------|----------|--------|-------|-------|-----------|----------|--|
| | 1868-69. | | | | | | |
| Jvari | | 65 | 46 | 64 | 40 | 68 | |
| Bajri | | 39 | 32 | 43 | 44 | 42 | |
| | 1869-70. | | | | | | |
| Jvari | | 30 | 32 | 27 | 44 | 38 | |
| Bajri | | 27 | 26 | 27 | 34 | 28 | |
| | 1870-71. | | | | | | |
| Jvari | | 36 | 34 | 37 | 38 | 42 | |
| Bajri | | 30 | 28 | 31½ | 30 | 32 | |
| | 1871-72. | | | | | | |
| Jvari | 30 | 24 | 22 | 20 | 32 | 47 | |
| Bajri | 24 | 20 | 19 | 12 | 24 | 43 | |
| | 1872-73. | | | | | | |
| Jvari | 34 | 48 | 28 | 44 | 60 | 57 | |
| Bajri | 24 | 40 | 20 | 38 | 50 | 52 | |

| ARTICLE. | Indapur. | Yevat. | Poona. | Supa. | Telegaon. | Manchar. |
|----------|----------|--------|--------|-------|-----------|----------|
| | 1873-74. | | | | | |
| Jvari | 60 | 58 | 48 | 64 | 70 | 74 |
| Bajri | 50 | 44 | 34 | 48 | 55 | 66 |
| | | | | | | |
| | 1874-75. | | | | | |

| Jvari | 92 | 72 | 60 | 64 | 80 | 57 | |
|-------|----------|----|-----|-------|----|----|--|
| Bajri | 70 | 56 | 44 | 64 | 60 | 47 | |
| | | | | | | | |
| | | | 187 | 5-76. | | | |
| Jvari | 76 | 64 | 56 | 56 | 60 | 24 | |
| Bajri | 68 | 52 | 42 | 44 | 45 | 22 | |
| | | | | | | | |
| | 1876-77. | | | | | | |
| Jvari | 46 | 18 | 38 | 11 | 30 | 13 | |
| Bajri | 40 | 18 | 30 | 10 | 25 | 12 | |
| | | | | | | | |
| | 1877-78. | | | | | | |
| Jvari | 18 | 22 | 18 | 14 | 35 | 36 | |
| Bajri | 18 | 20 | 18 | 13 | 30 | 24 | |

| ARTICLE. | Indapur. | Yevat. | Poona. | Supa. | Telegaon. | Manchar. | |
|----------|----------|--------|--------|-------|-----------|----------|--|
| | 1878-79. | | | | | | |
| Jvari | 20 | 22 | 20 | 18 | 40 | 36 | |
| Bajri | 20 | 24 | 18 | 16 | 35 | 24 | |
| | | | | | | | |
| | 1879-80. | | | | | | |
| Jvari | 18 | 22 | 18 | 18 | 50 | 47 | |
| Bajri | 18 | 20 | 18 | 22 | 40 | 31 | |
| | | | | | | | |
| | 1880-81. | | | | | | |
| Jvari | 28 | 26 | 28 | 24 | 60 | 60 | |
| Bajri | 20 | 20 | 24 | 18 | 50 | 50 | |
| | | | | | | | |
| | 1881-82. | | | | | | |
| Jvari | 76 | 56 | 50 | 52 | 60 | 66 | |

| Bajri | 48 | 42 | 38 | 40 | 45 | 47 |
|-------|----------|----|----|----|----|----|
| | | | | | | |
| | 1882-83. | | | | | |
| Jvari | 62 | 52 | 64 | 52 | 55 | 52 |
| Bajri | 46 | 40 | 46 | 40 | 45 | 43 |

WEIGHTS AND MEASURES.

Articles are sold by weight, by measure, and by number. Pearls, precious stones, cotton, tobacco, raw and clarified butter, oil, spices, groceries, firewood in Poona city, opium sweetmeats, and some vegetables and fruits are sold by weight. In the case of pearls and precious stones the weights used are grains of barley jav, rice tandul, wheat gahu, and rati. Rati, originally the seed of the Abrus precatorius, is now generally a small piece of copper or flint weighing 21/4 to 23/4 grains. The price of pearls is not fixed at so much the rati but at so much the chav a measure or standard obtained from a calculation based on the number and weight of the pearls, and divided into 100 dokdas or parts. To reduce ratis to chave the square of the number of ratis is multiplied by 55 and the product divided by 96 times the number of pearls. Thus if 11 pearls weighing 24 ratis are to be bought at Rs. 8 the *chav*, the price would be $24 \times 24 \times 55 \times 8/96 \times 11 = 240$ rupees. The table observed in the case of gold is eight *gunjs* one masa; 2 4/5 gunjs one val; six masas one sahamasa; two sahamasas or twelve masas or forty vals, one tola. The qunj is red and about the size of a small pea is the seed of a wild creeper and the val which is also red and a little larger is the seed of the chilhari tree. The masa, sahamasa, and tola are square, eight-cornered, or oblong pieces of brass and sometimes of China or of delf. The tola weighs a little more than the average Imperial rupee in use which is equal to 11¼ masas. In weighing silver and fragrant oils and essences the Imperial rupee is always used. But as owing to wear it is not always of uniform weight discount at the rate of eight per cent is allowed in wholesale purchases of silver. For cheaper metals and other articles sold by weight the unit of weight is a *sher* weighing seventy-six rupees, with its fractions the *navtak* or one-eighth, *pavsher* or one-fourth, and *achher* or one-half. For quantities of over a sher the table for metals and other articles sold by weight is four shers one dhadi and sixteen shers one man. In the case of oils, raw and clarified butter, spices, raw sugar gul, groceries, and tobacco the table is forty shers one man, and three mans one palla. For firewood where sold by weight the table used is

eighty pounds one man and twenty mans one khandi. Except in the case of firewood and similar heavy substances, where stone weights are used, all the weights are made of iron, generally English-made avoirdupois weights with the pound unit scooped out at the back to bring them to the exact weight. Grair is measured by wooden cylinders with narrow necks in the middle to admit of their being held in the hand with case. The unit of measurement is also a *sher* having the same fractions as the weight unit. The contents of a sher measure, which is equal to 2% pints, weigh seventy-six to ninety-eight rupees. The table observed is four *shers* one *payli*, twelve *paylis* one *man*, 21/2 mans one palla, and eight pallas one khandi. In 1821 there were three tallies of grain measures. The sher was the same in all three and, taking the average of the whole, the weight of one measured sher of bajri, math, mug, sava, jvari, udid, vatana, wheat, and masur, was one-fourteenth of a pound more than 2½ pounds avoirdupois. The first table was four *shers* one *payli*, twelve *paylis* one *man*, and twenty mans one khandi. This baroli or twelve-payli man was the common man and the one in use in the town of Poona. The second table was four shers one payli, sixteen paylis one man, and twenty mans one khandi. This sololi or sixteen-payli man was used in the village group of Sandus in Pitas and to the southward. The third table was 31/2 shers one payli, forty-two shers or twelve paylis one man, and twenty mans one khandi. This was used in the Mavals or hilly west. Captain H. D. Robertson, East India Papers, IV. 572. Standard weights and measures are kept in every mamlatdar's office, and, once a year, all weights and measures are tested and stamped by the police. Brass and copper pots serving as a quarter, a half, and a whole 76-rupee sher are used for measuring milk and small quantities of oil. Clarified butter when brought for sale in small quantities by the people of the western hills is also sold by these capacity measures. Leaf vegetables are sold by the bundle, grass and *ivari* stalks are sold by the *pachunda* or five bundles, firewood is sold by the headload or the cartload, and cowdung-cakes by number. Mangoes are sold wholesale by a hundred or shekda equal to 312. Betel leaves are sold by the hundred or the thousand. In measuring cloth either the *gaj* or the yard is used. In the case of the gaj the table used is eight yavs one anguli or thumb breadth; two angulis one tosa of 11/2 inches; twelve tasus one hat or cubit of eighteen inches, and two hats one gaj of three feet. Readymade clothes, waistcloths or *dhotars*, and scarfs or *uparnas* are sold in pairs; other articles of clothing are sold singly except shoes and stockings which are sold by the pair. Bricks and tiles are sold by the thousand, rafters and bamboos by the hundred, squared timber by its cubic contents, and unsquared timber by the piece. Heaps of gravel or murum, of road-metal or khadi, and of sand earth and stone are

measured by their cubic contents, the usual unit of measurement being a baras of 100 cubic feet. Cut stone is sold by the square gai equal to eight square feet. Before the revenue survey the land measure was three mushtis or fists one vit, two vits one hat, 5-- hats one kathi, twenty kathis one pand, twenty pands one bigha, and five bighas one rukka, six rukkas one khandi, twenty-four rukkas one chahur The area of the chahur, depended in many cases on the quality of the land. or takka; and two chahurs or takkas one pakka. The survey measurements are a chain of thirty feet one anna, sixteen annas one *guntha*, and forty *gunthas* one acre of 4840 square yards. Thirty *gunthas* are equal to one *bigha* or 11/3 *bighas* are equal to one acre. [The kathi five cubits long by one cubit broad is said to have been carved in stone in the late Shanvar Vada at Poona. It was based on the length of the hand of Peshwa Madhavrav II. (1774-1796). After a time the length of the Peshwa's hand became exaggerated and the hand was taken to mean the length of a man's arm from the elbow, to the tip of the middle finger with an additional span. Hence arose some variations in the size of a bigha. Mr. J. Pollen, C. S. Partan meaning two or four bighas is a word often used by Kunbis speaking among themselves. Twenty partans make one aut.

The old table for measuring time is sixty *vipals* or winks one *pal*, sixty pals one ghadi of twenty-four minutes, 2¼ ghadis one hara, 3¾ ghadis one chaughadi, 7½ ghadis one prahar, eight prahars one divas or day, seven divas one athavda or week, two athavdas one paksha or fortnight, two pakshas one mas or month, twelve mas one varsh or year. In former times the Hindus had neither watches nor sun-dials. Their time measure was the water-clock a copper pot filled with water in which floated a brass cup with a small hole in the bottom which took an hour to fill and sink. The water-clock, though never referred to in ordinary life, is still used at marriage and thread ceremonies. Besides by the water-clock time was calculated by the length of shadows. To tell the time of day from a shadow one plan is, in an open sunlit spot, to measure in feet the length of one's shadow, to add six to the number of feet, and divide 121 by the sum. The quotient gives the time in *ghadis* of twenty-four minutes after sunrise if the sun has not crossed the meridian, and before sunset if the sun has crossed the meridian. Another plan is to hold upright a thin rod eighteen anglis or finger-breadths long, bend it so that its shadow will touch the other end of the rod on the ground and measure in anglis the perpendicular height of the rod. This like the other plan shows the number of *qhadis* either after sunrise or before sunset.

COMMUNICATIONS.

ROUTES.

B.C. 100.- A.D. 1818.

THE history of Cheul, Kalyan, Supara, and Thana in the Konkan, and of Junnar, Nasik, and Paithan in the Deccan shows that from early times several important trade routes passed through the Poona district. From at least as far back as the first century before Christ, Junnar, about a hundred miles west of Paithan sixty south of Nasik and fifty north of Poona, had two main routes to the coast through the Malsej and through the Nana passes. In the Nana pass, inscriptions, steps, rockcut rest-houses, and cisterns show that as far back as the first century before Christ much was done to make the route easy and safe. The fine Buddhist caves at Bedsa, Bhaja, and Karla, the large but plain caves of doubtful date on Lohogad hill, the rock-hewn Shiv temple at Bhamburda and the small Ganeshkhind eaves of uncertain date near Poona, and the groups of Buddhist caves at Ambivli, Jambrug, and Kondane in Thana make it probable that the Bor pass was a highway of trade between B.C. 100 and A.D. 600. Of Poona trade routes and trade centres under the Hindu dynasties which flourished between A.D. 700 and A.D. 1300 few traces remain. Two great rock-hewn reservoirs on the top of Shivner show that the hill was held as a fort by the Devgiri Yadavs and make it probable that Junnar was a place of trade. Under the Bahmanis in the fourteenth and fifteenth centuries Junnar and Chakan were strong military posts and probably local trade centres. In 1499, after a brief stay at Junnar, Malik Ahmad, the founder of the Nizam Shahi dynasty, moved his capital from Junnar to Ahmadnagar. During the sixteenth century, when the wealth of the Bombay Deccan was divided between the rulers of Ahmadnagar and Bijapur, probably no main line of traffic passed through the Poona district. About 1636, when it was made part of Bijapur, Poona probably rose in importance as a centre of trade, and at the same time Junnar gained in consequence as the southmost post of Moghal power. Shivaji's disturbances soon followed, and little trade can have centred in Poona till 1750, when it became the capital of the Maratha empire. After the country passed to the British, traces of pavement, steps, and water-cisterns showed that the Peshwas had attempted to improve the Nana, Malsej, Bhimashankar, and Kusur passes. [Bom. Rev. Rec. 144] of 1819, 3317.]

1779-1826.

The first road made by the British was the POONA-PANVEL road, from Panvel in Thana through the Bor pass to Poona. In the close of 1779

the leaders of the unfortunate expedition that ended in the Vadgaon Convention spent four weeks (23rd November-25th December) in making a path fit for Artillery up the Bor pass. [Account of Bombay, 176-7.] In 1804, General Wellesley constructed a good military road from the head of the Bor pass to Poona. The massive stone ramps or pavings, which in 1864 were visible in places for the entire distance a little to the south of the line which is now the old post road, [Deccan Scenes (1864), 330.1 and traces of which may still be seen at the eastern foot of the Isapur hills, belong to General Wellesley's road. After the fall of the Peshwas in 1817, owing to its importance in joining Bombay and Poona, one of the first cares of the Bombay Government was to improve the road from Poona to Panvel in Thana. In 1819 it was proposed that the Nana and Kusur passes should be repaired. [Mr. Marriott, 29th September 1S19, Gov. Rev. Rec. 144 of 1819, 3317.] In 1825, though still steep, Bishop Heber considered that the Bor pass road was probably sufficient for the intercourse that either was or was likely to be between the Konkan and the Deccan. [Heber's Narrative, II. 200. In 1826, according to Captain Clunes, the chief lines of communication in Poona lay through Poona and Junnar. [Itinerary, 18-46. The BOMBAY-AHMADNAGAR road of 148 miles from Panvel through Chauk, Khalapur, and Khopivli in Thana ascended the Bor pass and entered Poona near Khandala, and stretching through Lonavla, Karla, Khadkala, Vadgaon, Kuvla, Tathavade Aund, Poona, From the travellers' bungalow near the entrance of the cantonment to the church was 11/2 miles and the continuation of the road to the ruins of Sindia's palace near which the cantonments ended was 1½ miles further. Clunes' Itinerary, 10. Vagholi, Loni, Koregaon, Ganpati's Ranjangaon, and Kardalvadi, left it near Sirur and continued its course to Ahmadnagar through Hingni, Kadus, Ranjangaon, Sarole, Akulner, and Kedgaon. Besides the stone bridge over the Indrayani between Karla and Khadkala, which had seventeen arches and a total length of about 400 feet, there were on this road two flying bridges one across the Mula near Poona, the other across the Bhima near Koregaon. From this road a new excellent military road branched to the right near Vadgaon and passed by the villages of Shelarvadi, Kinai, Chinchuli, Nigri, Akurdi, Chinchvad, Bhosri, and Dapuri. This was the shortest road to Poona if the traveller had no wheel carriages. It continued from near Bhosri, passing Kalas, and crossing the Kirkee bridge, making a difference of about two miles between Bhosri and the Sangam. The KALYAN-AURANGABAD road of 185 miles, passing through Rahata, Murbad, Umbarpada, the Taloli pass, and Kumbalpada in Thana, and ascending the Malsej pass, entered the district near Karanjale, and stretching through Pimpalgaon and Junnar left it near Otur and continued its course through Brahmanvade, the Savarchur

pass, Sangamner, Rahata, Bamangaon, Bhorgaon, and Tisgaon. This road had two branches from Junnar, one of sixty-four miles through Ojhar, Pimpalvandi, and Belhe, leaving the district near Alkuti, and continuing its course through Parner, Supa, and Kedgaon to Ahmadnagar; the other branch forty-five miles through Narayangaon, Hivra, the Utti pass, Pargaon, and Annapur to Sirur. The POONA-SURAT road of 254 miles, through Chakan, Narayangaon, and Hivra, leaving the district near Otur continued its course through the Vashera pass, Devthan, the Sinnar pass, Nasik, Dindori, the Rahud pass, Umbarthana, the Nirpan pass, the Vagh pass, Gandevi, and Navsari. In the fair season this was a good cart road throughout except at the Vashera and Sinnar passes in Ahmadnagar and Nasik. The Rahud pass in Nasik offered no obstacles to carts. Another road of 290 miles, the usual line of march for troops from Poona to Surat, was through Ravet, Vadgaon, Karla, and Khandala on the district border, and Khopivli, Chauk, Panvel, Ambagaund, Kalyan, Titvala, Lap, Vajrabai, Arna, Butna, Daisar, Mahagaon, Tarapur, Saunta, Jahye-Burdi, Umbargaon, Daruti, Bagvada, Parnera, Rola, Gandevi, Navsari, Lanchpur, and Sachin. From Panvel in Thana there was another road to Surat by sea and land of about 256 miles. The POONA-KALYAN road of seventy-five miles through Ravet and Vadgaon, by the Kusur pass, continued its course through Neral, Badlapur, Beluli, and Kansa. The POONA-KHANDALA road of forty miles passed through Banera, Kasarsai, Dhaman Khind, and Lonavla. The POONA-JUNNAR road of fifty miles passed through Chakan, Peth, Narayangaon, and Khanapur. This road, though in places difficult for carts, was a fair road for pack-cattle. The POONA-DHULIA road of 201 miles through Chakan, Peth, Narayangaon, Pimpalvandi, and Ale left the district near Bota and continued its course through the Abora pass, Kikangaon, Korbala, Kopargaon, Yeola, Savargaon, Manmad, Malegaon, the Daragaon pass, Arvi, and Laling. The POONA-AURANGABAD road of 144 miles, through Loni, Koregaon, and Ganpati's Ranjangaon, left the district near Sirur and continued its course through Narayangaon, Supa, Ahmadnagar, Imampur, Kevra, Toke, Dahigaon, and Jalgaon. From Ahmadnagar another road went through the Nimba-Dhera pass, Vambori, and Kevra. From Aurangabad a branch led forty miles to Jalna, and a line of 105 miles went direct from Ahmadnagar through Paithan. The Poona-Sholapur road of 157 miles, through Hadapsar, Loni, Urali, Yevat, Patas, Chicholi, and Indapur, left the district near Tembhurni, and continued its course through Savaleshvar and Kundi. Another road of 157 miles to Sholapur, through Urali, the Diva pass, Belsar, and Jejuri, and leaving the district near Nimbat, continued its course through Baneya, Nataputa, Yallapur, Pandharpur, Dehgaon, Babhulgaon, and Singoli. From Patas a road of 136 miles branched

towards Mominabad or Ambejogai, passing through Pedgaon, Pimpalvadi, Khurda, Beh, and Savargaon. Near the Diva pass the road branched five or six miles to Sasvad, and, from Chincholi, a branch led to Sholapur through Tuljapur, making the whole distance from Poona 343 miles. From Sholapur the road was continued to Sikandarabad by Naldurg, a distance of 192 miles. The POONA-BELGAUM road of 241 miles, through Jejuri, left the district near Nimbat and continued its course through Rahimatpur, Pusesavli, Tasgaon, and Edur where was a flying bridge and boat across the Krishna, Ghotgiri, Marehal, Ashti, and Kanbargi. From Edur a road led to Dharwar through Padshapur, Nesargi, Shidapur, and Gadag. Another road of 213 miles through the Katraj pass continued its course through Kikvi, Shirval, Khandala, Surul, Bhuinj, Satara, Miraj, Karad, Islampur, Ichalkaranji, Sandalgi, Chikodi, Hukeri, and Yamkanmardi. From Karad a branch went to Malvan through Malkapur, the Anaskura pass, and Kharepatan, and another through Battis-shirala, Kolhapur, the Phonda pass, and Janavti. The POONA-DAPOLI road of ninety-seven miles went through Vadgaon, Khadakvasla, Khanapur, the Panba pass, and Torna-peth, left the district by the Dhoni pass and the Shevti pass, and continued its course through Mahad, Pali, and Mahlunga. A branch from Birvadi, seventeen miles from the Shevati pass, went to Ratnagiri through the Ghogra pass, Chiplun, and Makhjan. The POONA-GOREGAON road, sixty-six miles through Khadakvasla, Gorha, and the Kuran pass, continued its course through the Kumbha pass. Another road fiftyseven miles branched from Kuran and went by the Devi pass. The POONA-NIPANI road of 211 miles, through Loni, the Khor pass, Morgaon (Chinchvad), and Gulunche, left the district near the Nira and continued its course through Tamgaon, Rahimatpur, Hingangaon, and Edur-Maniri. The POONA-NAGOTHNA road of sixty-four miles through Chande-Nande and Akola, left the district by the Sai pass and continued its course through Vasunda, Jambulpada, Rahubgaon, and Chikni.

1826-1836.

Since 1826 all of these leading routes have been taken up and made into fair or good roads. In 1830 the Poona-Panvel road was greatly improved and was opened in state by Sir John Malcolm, the Governor of Bombay. At that time the mail cart to Poona on this road was the only mail cart in India. Some years passed before the road was generally used for carriages. In 1830 hardly a single cart was met between Khandala and Poona, and long droves of pack-bullocks had possession of the road. [Deccan Scenes, 33.] In spite of the improvements the Bor pass, though it did credit to the time in which it

was built, was far from easy of ascent. The gradients were steep and the curves sharp and numerous. In 1832 M. Jacquemout described the road as makadamised and kept by Pioneers in such order as would have been considered good in France. [Voyages, III. 583.] In 1836 the opening of roads and the improving of transit were among the points which received most attention from the early survey officers. [Among the improvements planned by the revenue survey officers the making of a new light cart was one of the greatest importance. In 1865, in a speech in one of the debates on the Survey Bill, Sir Bartle Frere, then Governor of Bombay, said that carts in 1836 were rarely seen beyond Poona. In five months he remembered seeing only three carts in the country between Poona and Sholapur, and these were brought from some Madras station. At that time the only local cart wheels were discs of stone, and carts were large lumbering contrivances which remained as heirlooms in families for generations. Lieutenant Gaisford applied himself to improve the country cart and the ordinary Deccan cart was the result of his labours. The new cart was to be as light and cheap as possible, and yet strong enough to be used in a Stony country where roads were almost unknown, and where workmen able to repair the most simple wheeled vehicle were often not to be found within fifty miles. He get up a factory for these carts at Tembhurni in Sholapur, and not only made carts but trained workmen from the villages round to repair them. At first it was difficult to find any one who would buy the carts even at cost price, but in time their number considerably increased. In Indapur alone they rose from 291 in 1836 to 1165 in 1856. The carts which replaced the old stonewheel carts and the Vanjari bullocks have in their turn helped to improve old roads and open new lines of communication. Bom. Gov. Sel. CLI. 33.34.] A marked change in the number of roads took place in some parts of the district during the thirty years of the first survey (1835-1866). [Lieutenants Wingate and Gaisford applied themselves to increase the facilities of transit in the Deccan. At first they had very small means at their disposal. Government gave small sums often as low as Rs. 5 a mile for the improvement of roads. Little could be done for such an amount beyond removing the most serious impediments to wheeled traffic along existing tracks. Sir Bartle Frere, Gov. Sel. CLI. 33.1

1836-1850.

In 1836 when the survey was introduced there was not a mile of road in Indapur. The construction of the Imperial line of road from Poona to Sholapur passing by the town of Indapur was the first great improvement. By 1850, five lines of made road passed through the district. The chief roads were the old Poona-Panvel road through the

Bor pass about seventy miles, the Poona-Ahmadnagar road also about seventy miles, the Poona-Junnar road about fifty miles, the Poona-Indapur road ninety miles, and the Poona-Satara road seventy-six miles. The POONA-PANVEL road, the chief road-work of the Bombay Government, was well metalled throughout. It had many long and some fairly steep slopes down which the superfluous surface water would have rushed with destructive violence but for a simple contrivance which broke its force and made it comparatively harmless. At about one hundred feet apart ridges of earth, three to four inches high and about a foot wide, were drawn slanting across the road. The ridges were formed by loosening the stones and earth with a pickaxe. Their object was, before it gained force or volume, to turn the surface water into one of the side ditches. This the ridges did very effectually when they were properly watched, so as to repair the breaches made in them by cart wheels. When they were kept in order no more water could rush down any portion of the slope than fell between two of the little ridges. When little rain fell, the spaces between the ridges were kept comparatively dry and firm, for the small quantity of water which was then to be disposed of soaked quietly into the ditch, along the loose stones and earth of which the ridges were made. Towards the close of the rainy season the ridges were allowed to be worn by the traffic to the level of the road. In this way the road escaped the perils of the rainy season with comparatively little damage. [Mackay's Western India, 379. Mr. Mackay adds: For about half its course the road runs through one of the wettest districts of Western India. The quantity of rain which falls during the south-west monsoon between Panvel and the Sahyadris, and, for about twelve miles to the east of Khandala at the top of the Bor pass, is about 50 per cent more than the average fall at Bombay. Within Poona limits the road was well bridged. The great obstacle to traffic was the Bor pass, where the ascent from the low land to the high land, was a rise of 2000 feet by a zigzag and frequently precipitous course of about four miles. This was one of two points at which the Sahyadris could be ascended or descended by wheeled vehicles with anything like safety along a course of about 500 miles. Still so difficult of ascent or descent was the Bor pass that no one thought of driving up or down it in a carriage. Passengers travelling by the public conveyances were carried up and down in palanguins, there being different sets of coaches for the high and low portions of the road. Private carriages were pulled up or let down by numerous bodies of workmen, or they were carried up and down swung from a number of poles which rested on men's shoulders. Empty carriages had been pulled up by horses, but this was generally considered a good day's work for the animals. A man who had any regard for his horse would not even ride him up or down the pass,

prefer-ring to have him led, and betaking himself either to a pony or a palanguin. In the Konkan the road crossed a rich rice country; but its chief traffic came from above the Sahyadris. It was principally owing to the traffic of districts beyond Poona turning to this route, because there was no other means of easy communication with the coast. The country from the Sahyadris to Poona was generally of a poor, thin, light soil, which of itself could sustain no great traffic. The POONA-AHMADNAGAR road started almost at right angles to the Poona-Panvel road from which it differed simply in not being metal-led. It was bridged and fairly ditched, the surface being covered not with broken stone but in some places with loose round stones or coarse gravel, and in others with small fragments of hardened clay. Occasionally the gravel and clay were combined and there the road was generally in the best condition. During the dry season it was practicable enough and could be driven over without difficulty; during the rains it was indifferent throughout and at many points bad. It was designed as a military road as Ahmadnagar was the head-quarters of the Bombay artillery. Like the Poona-Panvel road it had proved of advantage to the general traffic. Although it crossed a comparatively poor country it was the chief feeder of the Poona road. With its continuation through the Nizam's territory to Aurangabad, it drew to Poona much of the traffic of Berar out of what would have been its natural course had communications been open between that important valley and the coast. To gain this circuitous line of made road, much of that traffic turned south to Aianta from which it could reach Bombay only by the made road, which it sought by traversing nearly three-quarters of the circumference of an enormous circle. The next of the made roads was the POONA-JUNNAR road. It was designed either to proceed by the Ale pass across several streams and several spurs of the Sahyadris, to Sinnar and Nasik, with the view of uniting Poona with Malegaon the great military station in the north Deccan; or to take the more direct route from the Ale pass to Malegaon, avoiding Nasik and flanking the spurs of the hills. The POONA-INDAPUR road led south-east from Poona to Indapur about half-way to Sholapur. Of all the roads that converged on Poona this Indapur road was most in the direct line of the Poona-Panvel metalled road, so that traffic directed by it upon the Poona-Panvel road with a view to reaching Bombay could scarcely be said, so far at least as the district between Poona and Indapur was concerned, to have been taken out of its course, as it must have been from other districts by any of the roads leading through Poona. The road was by no means as perfect a road as that leading to Ahmadnagar. Even the Poona end of it, after a little rain, was little more than passable for a carriage. It crossed a very practicable line of country, as nearly its whole course to Indapur lay along the right bank

of the Bhima. If the traffic was not at first great it was because the country was poor. At Indapur the road crossed the Bhima and proceeded through a richer country almost in a straight line to Sholapur. The POONA-SATARA road was the best specimen of a made road in the Deccan. It was not bridged throughout, the only completed bridges had been built by native chiefs. The road surmounted two passes, one of them, the Babdev pass about eight miles south of Poona, being one of the worst specimens of a pass in Western India. Its angles and gradients were frightful, its sharp turns being in some places flanked by low walls which afforded but a slight bulwark against the precipices which they crowned. The road in the steepest parts was constantly rough, being covered to some depth with loose round stones. This to some extent served to check the impetus of a descending load, but greatly increased the toil of dragging a load up. Beyond the crest of the pass the road entered a broad plain bounded on the south by the Salpa range and watered by many streams. The first stream was at the village of Hivra past which it brawled over a somewhat wide and rocky channel; it was unbridged. The next was beyond Sasvad, a narrower but deeper stream with a fierce current during the rains; it was also unbridged. There was no other stream of consequence until the Nira was reached, one of the largest tributaries of the Bhima. The Nira bridge was a well-known point on the road. The bridge which was a long wooden one, resting on stone piers springing to some height from the rocky channel of the river, had been built by the Peshwas. There were several bridges within Satara limits. Besides these main routes, as in the rest of the country, were several fairweather roads practicable for carts, frequented tracks, and postal tracks. The fair-weather roads were natural tracks, merely showing the course taken by an irregular traffic over the open surface of the country. The best of them were practicable during the fair weather for carts, simply because at that time carts could pass over much of the surface of the country. The frequented tracks were numerous in every thickly peopled part of the country and were a grade lower than the fair-weather cart-tracks. The lines laid down as post tracks were no better, the mail being generally carried by foot-runners. All these roads were useful as showing the natural lines of traffic. Of the roads the Poona-Panvel and the Poona-Ahmadnagar roads were alone thoroughly bridged and available for traffic throughout the year. On the other roads, during the greater part of the rainy season, traffic was stopped by the streams which crossed them. The suddenness with which the streams stopped traffic was sometimes startling. A stream which at a place less than a quarter of a mile distant, was known to be practicable, by the time required to reach its banks, became a foaming

and impassable torrent and remained impassable for days. To such interruptions even most of the made roads were liable.

1863-1884.

Since 1863 when local funds were created the work of opening roads has been steadily pressed on and the district is now well pro-vided with lines of communication. At present (1884) in the Poona and Kirkee cantonments and in the civil limits of the two stations, forty-two miles of Imperial roads and twenty-eight miles of provincial roads, all metalled and bridged, are kept in repair at a yearly cost of £1700 (Rs. 17,000) to Imperial and £1700 (Rs. 17,000) to provincial funds. Of district roads there are seventy miles bridged and metalled, 104 miles partly bridged and metalled, and 493 miles partly bridged and murumed. The old POONA-PANVEL road, entering the district at Khandala and passing south-east by Lonavla, Talegaon, Kirkee, Poona, Patas, and Indapur, is a well made road metalled as far as Patas and then *murumed*. The crossing of the Bhima at Hingangaon, where a ferry-boat is worked during the south-west rains, and the crossing of the Dalaj are serious obstacles to traffic during the rains. This road was of immense advantage to the district till the opening of the railway in 1862. It brought Poona, which is the great grain market of this part of the Deccan, within easy reach of grain and brought most villages in the neighbourhood of Poona in direct communication with Indapur which is midway between Poona and Sholapur. Dealers exporting produce to Poona and Sholapur naturally tried the half-way market of Indapur. Many cartloads of merchandise intended for Poona or Sholapur were often disposed of in transit at Indapur and the return carts were laden with produce which would command a better price in the respective markets. The opening of the railway in 1862 drove the cartmen from this road and considerably affected the importance of the Indapur market. Though the number of carts making use of the road has diminished those that have been driven off the line are probably such as came from long distances and the local traffic by the road is still considerable. The road is still of local importance in supplying the Indapur market with the produce of the sub-division. The POONA-AURANGABAD road is metalled forty-one miles as far as Sirur and, except at Koregaon on the Bhima and two or three unimportant streams, is bridged and drained throughout. The old POONA-SATARA road, thirty-nine miles as far as the Nira, through the Diva pass, Sasvad, and Jejuri, is a fair road partly bridged and drained. It is at present kept as a local fund road. The new POONA-SATARA road of thirty miles passing through the Katraj pass and Shirval, is a first class metalled and bridged road kept in good order.

The POONA-NASIK road sixty-two miles through Khed, Manchar, Narayangaon, and Ambeghargaon, is a *murumed* unbridged road. As the principal rivers are unbridged flying bridges are worked in the monsoon at Moshi on the Indrayani, at Khed on the Bhima, at Kalamb on the Ghod and at Pimpalvandi on the Kukdi, and at Ambeghargaon on the Alula; an ordinary ferry-boat plies at Vaki on the Bhama. A branch from this road goes from Narayangaon to Junnar. The local fund roads besides the already mentioned old Satara road are, the SIRUR-SATARA road fifty-four miles as far as the Nira bridge passing through the railway station of Kedgaon and crossing the Bhima at Pargaon by a flying bridge. The twenty-eight miles of this road from Sirur to Kedgaon are kept as a mail pony cart road. The POONA-SINHGAD road extends over twelve miles; the POONA-ALANDI road of thirteen miles runs parallel and close to the Nasik road; the SASVAD-INDAPUR road of fifty-four miles east and west passes through Baramati, Lasurna, and Nimbgaon; the VADGAON-SHIKRAPUR road of thirty-three miles through Chakan joins the Bombay-Ahmadnagar road at Shikrapur; the KHED-BHIMASHANKAR road thirty-one miles joins the Nasik road at Khed; the KHED-SIRUR road through Pabal extends over thirty-two miles; the POONA-PAUD road extends over twenty-one miles; and the DIKSAL-BARAMATI road over seventeen miles. All these local fund roads are *murumed* and are more or less bridged, crossing some of the rivers by flying bridges. During the rains when the ground is wet many of the roads are difficult for wheels. Yearly repairs are made and improvements are being gradually introduced.

PASSES.

[Mr. John McLeod Campbell, C.S.] As in the rest of the Deccan the local hill passes or ghats belong to two leading systems, those that cross the Sahyadris and those that cross the spurs that stretch east and south-east from the Sahyadris. Down the Malsej pass about sixtysix miles north of Poona, a line for a cart road has been surveyed, and it is expected that in a few years the road will be begun. At present the only road down the Poona Sahyadris fit for wheels is the Bor pass. Except this and the Malsej and Nana passes the rest of the openings in the Poona Sahyadris are foot-paths and have no considerable traffic. These foot-paths are very intricate. It is with the greatest difficulty that people travel along them when loaded with the produce of their fields for the local markets. Where the rock is very steep they use a simple bamboo ladder with the help of which they can travel by the most direct routes. The ladder consists of a substantial bamboo shorn of its branches with a small stump at each joint or division to be used as a step. Captain A. Mackintosh (1839) in Trans. Bom, Geog. Soc. I,

290.291. The Malsej and Nana passes have considerable Vanjari traffic carried on pack-bullocks. Of the Sahyadri passes, beginning from the north, the first is NISNI or the Ladder, a steep and difficult route from Talemachi in Junnar to Divapanda in the Murbad subdivision of Thana; it is impassable for cattle and is little used by foot travellers. MALSEJ at the head of the Madner valley, 2062 feet above the level of the sea, is the straight route between Ahmadnagar and Kalyan. It descends about five miles from Khubi in Junnar to Thidbi in Murbad. In 1826 it was passable by camels and elephants, but was steep and in some places narrow with a precipice on one side. Clams' Itinerary, 16. The descent, in which there is an excavation containing carved images of the Hindu gods Ganesh and Hanurnan and a cistern of fine water, is paved with large stones. In 1850, when the engineers of the Peninsula Railway came to India, the Malsej pass first engaged their attention. On examination the route presented such formidable difficulties that it had to be abandoned, and with it the general system of line of which it was a feature. In 1882 in connection with the proposal to open a cart road down the pass, toll-bars were established for six months to ascertain the traffic. The returns showed a considerable Vanjari bullock traffic outwards in wheat, Indian millet, tur, gram, myrobalans, butter, oil, raw sugar, chillies, betel leaves, coriander seed, pulse, turmeric, plantains, cattle including sheep, and country blankets; and inwards in rice, salt, nagli, vari, cocoanuts, dates, sesamum, metal, cloth, bangles, betel, fish, rags, paper, and timber. The export and import trade is with Junnar and other large villages in the Junnar sub-division. Besides the goods traffic there is a large passenger traffic chiefly husbandmen from Junnar and the neighbouring parts of the district on their way to and from the great labour market of Bombay. Six miles south-west of the Malsej pass at the head of the Kukdi valley are two passes NANGAR-DARA and BHORANDICHA-DARA or RITHYACHA-DARA from Anjanvel in Junnar to Bhorande in Murbad. These are steep and difficult, and are used only by Kolis. About a mile further south at the head of the same valley, is the NANA pass six miles in descent from Ghatgar to Vaisagre and Dhasai in Murbad. Next to the Bor pass this is the most used route between the Deccan and the Konkan within Poona limits. Near the Nana pass the Poona boundary runs far into the Konkan. The story is that in a dispute between the neighbouring Thana and Poona villages the Mhar of the Poona village pointed out from the top of the Sahyadris a line a long way west of the base of the cliff. The Thanavillagers jeered at him telling him to go over the precipice and show the line. The Poona Mhar tied winnowing fans under his arms and to his legs, and throwing himself over the cliff floated down unhurt. On reaching the ground he began to run west to what he called the Poona

boundary. The Konkan villagers seeing their lands passing away mobbed him to death, and fixed the boundary where his body lay. Mr. W. B. Mulock, C.S., Collector of Thana (1882). At the top the road runs through a narrow gorge between two steep rocks, the rock on the north being known as Nana's Angtha or thumb. The entrance to the pass is by a staircase cut deep through the rock and descending fifty to a hundred feet from the level of the plateau to a narrow terrace. Flanking the artificial staircase, in the precipitous rock which falls from the Deccan level to the terrace, are rock-cut caves which apparently were originally made, and which still serve, as travellers' rest-houses. The walls of the chief cave are covered with a famous inscription of the third Andhrabhritya king Vedishri Shatakarni, whose probable date is B.C. 90. From the terrace a stair, partly built partly rock-hewn, descends through heavily wooded slopes into the Konkan. The lower portion is easy and runs along rounded hills. At several places in the pass are rock-hewn cisterns with excellent water whose Pali inscriptions show that they were cut about a hundred years before Christ. In 1675 the English physician Fryer, who had been asked to Junnar by the Moghal governor, returned by the Nana pass and found it shorter and easier than the Avapa track up which he had been taken by mistake. At the top he was kept waiting by 300 oxen laden with salt, then so precious that the saying was whose salt we eat, not whose bread we eat. After standing for an hour he persuaded the bullock-men to stop and let him pass. Once past the salt bullocks, the road was feasible, supplied at distances with charitable cisterns of good water, and towards the bottom adorned with beautiful woods. [Fryer's East India and Persia, 128-129,] In 1826 the pass was frequented by Vanjaris in the dry season, but in the rains the steps into which the rock had been cut were in places dangerous for cattle. Though this route saved a considerable distance in going from Ahmadnagar to Kalyan, people with baggage and followers preferred to go round by the Bor pass. [Clunes' Itinerary, 145.] At present (1884) the pass is much used in the fair weather by market gardeners and oilmen from Junnar. These men loading their bullocks with packs of chillies, onions, and garlic, march from Junnar to Ghatgar at the top of the pass. Here they stop a night and next day their own packbullocks go down the pass unloaded and the packs are carried down the pass by special pass buffaloes belonging to the Ghatgar villagers. The buffaloes are paid $4\frac{1}{2}d$. (3 as.) a trip. Besides this there is a considerable Vanjari traffic in grain from Junnar to Murbad and Kalyan. Still the pass can never be more than a foot and cattle path. About ten miles south-west at the head of the Mina valley is AMBULI a small rugged pass leading from Ambuli to Palu, not a trade route. This though only a footpath is much used as it is the most direct route from

Junnar to Kalyan, KUTE-DARA and TIRGUN-DARA, footpaths leading from Hatvij in Junnar to Sonavle in Murbad are used only by Kolis, and are so steep that in places steps are cut in the rock. GOVELI, also a footpath, leads from Khed to Ubrole in Murbad. It is steep and little used. AVAPE, a descent of four miles from Avape in Khed to Khopivli in Murbad, is passable only for men, but is used to carry headloads of clarified butter into the Deccan and myrobalans from the Deccan coastwards. In 1675 the English physician Fryer on his way to Junnar being misguided had to climb the Sahyadris apparently by this path. The ascent was very difficult. There was no path and the breathless bearers threaded their way amid hanging trees, the roots of which were laid bare by the falling earth. To look down made the brain turn, and over-head pendulous rocks threatened to entomb the traveller. Intense labour drew tears of anguish from the servants' eyes and with much difficulty they carried their load to the top by a narrow cavern cut through rock. [Fryer's East India and Persia, 128-129.] Fryer returned by the Nana pass. SHIDGAD descending from Kondanvalin Khed to Narivli, is impassable for cattle, but is much used by footpassengers. Three paths, GHAR, UMBRA, and GUNAR lead from the Shidgad fort. About one mile west of the temple of Bhimashankar are two passes one to the village of Balhiner called RANSHIL and the other to the village of Khandas called BHIMA-SHANKAR. In 1826 the Bhimashankar paths had much traffic in spices, oil, and raw-sugar from the Deccan to Panvel and a return of salt from Panvel to the Deccan. Along much of their length old curbing and in many places old paving remain. The paths are now out of repair and are used only by a few laden bullocks, horses, and travellers who are carried in litters from Khandas. Two other footpaths close to the Bhimashankar pass are called HATKARVAT and SAKHARTAKI. AMBANALI two miles south of Bhimashankar is not passable for cattle. VAJANTRA a mile further is passable for unloaded cattle; NISNI, which is difficult even for men, is the continuation of VAJANTRA. At the head of the Bhima valley is KOLAMB also called BHATI, two miles south of Kotelgad, now out of repair and fit only for foot passengers and unladen cattle. It had formerly much traffic in rice and salt from Kalyan. Close to Kolamb is a steep footpath by which a detachment of the 4th Regiment climbed to Englad in February 1818 and surprised a party of Kolis. Clunes' Itinerary, 146. About five miles south-west, at the head of the A'ndhra valley, three passes PHENADEVI, ADKI, and SAVLE lead from Savle the first to Malegaon and the last two to Pimpalpada. Savle pass, which is paved but is in bad repair, was formerly used for dragging wood. In 1826 the yearly value of the timber dragged up this pass was estimated at £5000 (Rs. 50.000). [Cluncs' Itinerary, 146.] Four miles further south, and also at the head of the Andhra valley, is KUSUR

2149 feet above the sea, a winding path leading 2½ miles from the village of Kusurgaon to Bhivpuri, and in good repair. The descent is at first easy passing under fine shady trees. After some distance it is a steep zigzag down the hill-side. Most of it is roughly paved with large stones which are said to have been laid by one of the Peshwas. At Bhivpuri there is a fine stone reservoir built at a cost of £7500 (Rs. 75,000) by Parvatibai widow of Sadashiv Chimnaji of the Peshwa's family. The road is passable for mounted horsemen or laden bullocks, but not for carts. It is a great line of traffic from Talegaon to Karjat, Neral, Kalyan, and Panvel. The yearly toll revenue of about £20 (Rs. 200) is spent on repairing the pass. GALDEVICHA RASTA leading from Jambavli to Dak in Karjat and VALVANDI DARCHA MAL leading from Valvandi to Khadvai are used by foot-passengers and unloaded animals. Nine miles south west of Kusur, winding close under the slopes of Rajmachi, is the footpath of RAJMACHI known in Thana as the Konkan Darvaja or Konkan Gate, leading about five miles to the village of Kharvandi on the Ulhas river in Karjat. It was formerly passable by laden cattle, but is now out of repair and is used only by foot travellers. HINDOL and MIRRA, both of them footpaths, lead from Nandgaon and Kune in Maval to Kondane in Karjat. Eight miles south of Konkan Darvaja, at the top of the Indrayani valley about 2000 feet above the level of the sea is the BOR pass, a winding made road from Lonavla eight miles to Khopivli. At the close of 1779 the leaders of the unfortunate expedition which ended in the Vadgaon Convention spent four weeks (23rd November-23rd December) in making a path fit for artillery up the Bor pass. The track was improved in 1804 by General Wellesley. From its importance in joining Bombay and Poona the improvement of the Bor pass road was one of the first cares of the Bombay Government after the fall of the Peshwa. In 1825, according to Bishop Heber who passed through it, the road through the Bor pass though broad and good was so steep that a loaded carriage or palanguin could with difficulty be taken up. Every one either walked or rode and all merchandise was conveyed on bullocks or horses. To have carried a road over these hills at all was, Bishop Heber thought, highly creditable to the Bombay Government, and the road as it stood was probably sufficient for the intercourse that either was or was likely to be between the Deccan and Konkan. [Heber's Travels, 200.] A few years later the pass road was greatly improved, and in 1830 it was opened in state by Sir John Malcolm, the Governor of Bombay. In 1840 the pass road was metalled throughout and completed with bridges and drains so as to be passable for carts during the rains. In this year the traffic yielded a toll revenue of £2774 (Rs. 27,740). [Mackay's Western India, 379. In spite of the improvement in 1850 it was so difficult of ascent and descent that no one ever thought of driving up

or down in a carriage. Passengers travelling by the public conveyances were carried up and down in palanguins, there being different sets of coaches for the high and low portions of the road. Private carriages were pulled up or let down by numerous bodies of workmen or else they were carried up and down swung from a number of poles resting on men's shoulders. [Trade Reports, 1840-41, 380-81.] At present (1884) it is a first class metalled and curbed road twenty-two feet wide with masonry bridges, culverts, drains, dry stone retaining walls, and an easy gradient. It has considerable cart traffic from Poona to Panvel and Pen. Wheat, raw sugar, oil, clarified butter, millet, and cotton pass westwards, and salt passes inland. In 1881 the Bor pass toll yielded £790 (Rs. 7900). In 1860 the Peninsula Railway line to Poona was taken across the Sahvadris at the Bor pass. [Details of the Bor pass] railway are given below pp. 159-161. South of Khandala NAGPHANI or Cobra's Hood leading from Kurvanda in Maval to Chavri in Karjat is used by foot passengers and unloaded animals. Two miles south, at the head of the Indrayani river, KORONDI passable for laden cattle, also leads west to Chavri in Pen. Further south are KEVNI five miles between Yekoli and Pachapur, DEKYA four miles between Ghulka and Nenavli, AVLI five miles between Pimpri and Alvane used by foot passengers carrying no loads, and PIMPRI six miles between Pimpri and Patnus used by pack-bullocks carrying myrobalans salt and coals. Further south in the Mulshi petty division are NISNI AMBONE four miles from Maluste to Mangaon; AMBAVNE or KALAMBYA five miles from Ambavne to Kalamb: VARASDAR four miles from Saltar to Kondgaon; TELBEJA SAVASNI four miles from Telbela to Dhondse; NIVE or SAVATYA four miles from Nive to Patnus; TAMNI or SATHPAYRI three miles from Tamni to Vile, allused by foot passengers who often carry head-loads of myrobalans, butter, coals, salt, and rice; GADLOT on the direct road from Poena to Nagothna leading into the Pant Sachiv's state of Bhor; LENDH or LINO, NISNI, and TAMHANA, in the extreme south and fit only for men, lead into Kolaba. South of these connecting the Bhor state and Kolaba are several passes DEV, KUMBHE, THIBTHABE, KAVLYA, SHEVTYA, MADHYA, AMBOVAL, GOPYA, VARANDHA, and SHEVTA, all of which are useful for Poona traffic.

Of the passes over the spurs that run east from the Sahyadris the chief are in the Sinhgad-Bholeshvar range. Four cart roads cross the Sinhgad-Bholeshvar range at the Katraj, Babdev, Diva, and Bor passes. The KATRAJ pass is on the new Satara road, a fine piece of modern engineering, crossing the crest of the range in a tunnel. The BABDEV, about ten miles from Sasvad and between Bhivari and Kondhve Budrukh, is on the old Satara road through Haveli and

Purandhar. In 1803 Holkar brought his plundering bands up this pass. It was put in order about the year 1824, and for years afterwards was in a prosperous condition. Until 1853 it was used for wheeled carriages, but since the opening of the Diva and Bor passes in the same range of hills, it has been abandoned. In 1853, it was one of the worst specimens of a pass in Western India. Its angles and gradients were frightful to contemplate, its sharp turns being in some places flanked by low walls which afforded but a slight bulwark against the precipices which they crowned. The road in the steepest parts was constantly rough, being covered with loose round stones. This to some extent served to check the impetus of a descending load but greatly increased the toil of drawing a load up. At present it is impracticable for laden carts and is used by pack-bullocks and foot passengers carrying headloads of mangoes, figs, and vegetables to Poona from Supa and the neighbouring villages. The outward traffic is estimated to be worth about £200 (Rs. 2000) a year. The DIVA pass, between Diva and Vadki, seven miles further east and six miles north of Sasvad was made in 1853 at a cost of £8500 (Rs. 85,000) from Imperial funds to supersede the Babdev pass. The pass is kept in good order by yearly repairs, and wheeled carriages can easily go over it. Considerable traffic, consisting of grain of every sort, fruit, especially mangoes and figs, vegetables, raw sugar, firewood, butter, oil, cloth and other articles of foreign manufacture, metal work, timber, sugar, and spices, passes by this route. The inward traffic is worth about £20,000 (Rs. 2,00,000) and the outward about £10,000 (Rs. 1,00,000). The BOB or SINDAVNE pass, nine miles further east, near the end of the spur, between Vaghapur and Sindavne, is the oldest route across the Sinhgad-Bholeshvar range. It was crossed by the Duke of Wellington in his famous forced march in 1803, The Duke's famous march of sixty miles in thirty-two hours was from Baramati to Poona on the 19th and 20th of April 1803, Grant Duff's Marathas. 568. and by Peshwa Bajirav when he fled from Poona in 1817 Though superseded by the Babdev pass for traffic with Poona, the road is still kept in repair as it is a line of communication between the Urali railway station and Sasvad, Jejuri, and other places on the old Satara road. It was made in 1862 at a cost of about £100 (Rs. 1000) from local funds. At present the road is in good order and fit for wheeled carriages. The pass is chiefly used by pilgrims from the Urali railway station to Jejuri. The traffic chiefly in corn and other articles of daily use is worth about £2500 (Rs. 25,000) a year.

BRIDGES.

Besides four large bridges and one dam or dharan and several minor bridges in the town and cantonment of Poona and Kirkee, the district has forty-two bridges of not less than fifty feet long, Of the Poona and Kirkee bridges, the WELLESLEY Bridge called after the Marguis of Wellesley over the Mutha river at the Sangam, 498- feet long, of stone and lime masonry throughout, with eight 52½ feet span segmental arches and cut-stone parapet walls, including a roadway 28½ feet wide and forty-five feet above the foundation or river-bed, was built in 1874 at a cost of £11,093 6s. (Rs. 1,10,933). The original bridge which was entirely of wood was built in 1828 and was removed in 1839. A stone bridge was then built which continued in use till it was removed in 1874. The new bridge keeps the name of the former bridge, the people changing the word Wellesley into Vasli. Not far from this bridge to the west is the railway bridge over the Mutha. The LAKDIPUL on the Mutha river at the north-west end of the city was built in 1847, at a cost of £2697 10s. (Rs. 26,975). Though of stone it is called the Lakdi Pul or Wooden Bridge, because it is on the site of a wooden bridge which was built by one of the Peshwas and gave way in the floods of 1840. The present bridge is 523 feet long, with nine forty-height feet span segmental arches of stone and lime and parapets of coursed stone and lime masonry including a roadway 18¼ feet wide and 34½ feet above the foundation or river-bed. The FITZGERALD Bridge over the Mula-Mutha river below the Bund Gardens, 1002 feet long, of stone and lime masonry throughout, with thirteen sixty feet span semi-elliptical arches and stone parapet walls, including a roadway 28½ feet wide and 47¼ feet above the foundation or river-bed, was built in 1869, at a cost of £24,153 2s. (Rs. 2,41,531). HOLKAR'S Bridge over the Mula river at Kirkee, 548 feet long, is built of stone and lime masonry throughout, with nineteen seventeen-feet segmental arches, and a parapet of cut teak wood railing, including a roadway fifteen feet wide and twenty-eight feet above the foundation or river-bed. The KUMBHAR VES or Potters' Gate dharan or causeway is the oldest crossing over the Mutha river near Kasba Peth to the north of Poona. The old causeway gave way in the beginning of British rule, and the present causeway was built between 1835 and 1840 at a cost of about £3000 (Rs. 30,000), paid partly by Government and partly by the people. It is built of solid stone masonry, and is 235 yards long and seven yards broad. It has twelve nine-feet wide sluices. During the monsoon floods it is under water and impassable. The other bridges in the town of Poona are: the HALALKHOR or Sweepers' bridge over the Manik Nala sixty-eight yards long, a massive structure of cut-stone masonry with three five-feet broad vents or waterways leading to the Halalkhor quarters in Mangalvar Peth; it was built between 1835 and 1840. The JAKAT or Toll Bridge, connecting the Mangalvar and

Shanvar Peths, with three twelve-feet vents, was built between 1836 and 1840. Here the tolls were levied in the Peshwa's' time. GOSAVIPURA Bridge on the Manik stream was built in 1870 at a cost of £300 (Rs. 3000). It is a double bridge at a point where the main road branches. The arches are single of twenty-two feet span. The DARUVALA or Fireworkers' Bridge on the Nagzari stream, joining the Ravivar with the Nyahal, Rastia, and Somvar Peths, was built in 1870 at a cost of £1500 (Rs. 15,000). It is fifty-eight yards long and has four twelve-feet side vents. The BHATTI or Brick-Kiln Gate Bridge on the Manik stream joining Rastia's Peth with the Civil Lines was built in 1845. It is a small culvert of two seven-feet vents. The Parsi bridge or causeway on the Nagihari stream joining Ganesh Peth with Rastia's Peth was built in 1830 by a Poona Parsi. It has three five-feet wide vents, and is occasionally under water during the rains when it becomes impassable. The GANESH Peth Bridge, joining the Ganesh and NANA'S Peths, was built in 1835. It is a cut-stone bridge with three sixteen-feet arches. The BURUD or Basket-makers' Bridge near the Buruds' quarters, joining the Ravivar and Bhavani Peths, was built between 1840 and 1845 of solid cut-stone masonry. It has four ninefeet arches. The GHASHETI Bridge, joining Ganj and Vetal Peth with Bhavani Peth, was built in 1845 at a cost of £180 (Rs. 1800). It is of solid cut-stone masonry and has three eighteen-feet arches.

Of the forty-two other bridges in the district, twenty-three are on the Poona-Sholapur road, six on the Poona-Ahmadnagar road, three on the Poona-Nasik road, six on the Poona-Panvel road, and four on the Poona-Satara road. The bridges on the Poona-Sholapur road were built about the year 1836-37. Most are of coursed, one is of uncoursed, and four are of partly coursed rubble masonry. They are fifty to 175 feet long, with one to five ten to fifty feet segmental arches and eighteen to twenty feet wide roadway from nine to twenty-one feet above the foundation or river-bed. The bridges on the new Satara road which were built in 1856 are ninety to 162 feet long, of coursed rubble with three or four twenty to forty feet span segmental arches and twentyfour feet wide roadway from twelve to twenty-one feet above the foundation or river-bed. Of the three bridges on the Poona-Nasik road, which were built between 1854 and 1856, two are sixty-five feet, and one over the Mina at Narayangaon is 320 feet long of stone and mortar masonry. They have from one to nine, fifteen to fifty feet span segmental arches, and a roadway twenty to twenty-five feet broad and 10½ to twenty-five feet above the foundation or river-bed. The six bridges on the Poona-Ahmadnagar road, with the exception of the Ghod bridge, were built in 1842-43. Four are fifty-five to sixty-three feet long, one on the Vel river is fifty-two feet long, and one on the

Ghod, which was built in 1868, is 800 feet long. They are built of stone and mortar masonry with two to sixteen eight to fifty feet span segmental or semicircular arches and a roadway sixteen to twenty feet wide and 734 to 371/2 feet above the foundation or river-bed. The Vel bridge cost £2205 (Rs. 22,050) and the Ghod bridge £10,359 16s. (Rs. 1,03,598). Of the six bridges on the Poona-Panvel road, the Indrayani bridge which is built of stone and lime masonry, has seventeen twenty-feet span two-centre arches and a roadway fourteen feet wide and fourteen feet above the foundation or river-bed. The Dapuri bridge; which was built in 1842 at a cost of £6858 (Rs. 68,580), is 994 feet long, partly wooden and partly of stone and lime masonry, with thirteen thirty-five feet span arches and a roadway twenty feet wide and twenty-six feet above the foundation or river-bed. The other bridges are fifty-seven to eighty-four feet long, of stone, or stone and brick and lime masonry, with two to five ten to twenty-two feet span segmental arches and a roadway 17½ feet wide and nine to 13½ feet above the foundation or river-bed.

FERRIES.

Of thirteen public ferries, one is a second class, one is a third class, and eleven fourth class ferries. There are four classes of public ferries: I. those that do not make more than six trips in a day of fourteen hours; II. those that do not make more than ten trips; III. those that do not make more than fifteen trips; IV. and those that make more than fifteen trips. Two, one across the Ghod at Kalamb and the other across the Kukdi at Pimpalvandi on the Poona-Nasik road, are in Junnar; two, one across the Bhima at Khed and the other across the Bhima at Vaki on the Poona-Nasik road, are in Khed; one, across the Indrayani at Induri on the Talegaon Station road, is in Maval; one, across the Bhima at Koregaon on the Poona-Ahmadnagar road, is in Sirur; two, one across the Indrayani at Moshi on the Poona-Nasik road, and the other across the Mutha lake at Sangrun are in Haveli; one across the Nira at Pimpri Khurd on the Poona-Satara road is in Purandhar; two across the Bhima, one a third class ferry at Khanote and the other at Pargaon on the Sirur-Satara road are in Bhimthadi; and the remaining two, also across the Bhima, one a second class ferry at Hingangaon on the Poona-Sholapur road and the other at Chandgaon on the road to the Pomalvadi railway station, are in Indapur. Except the Sangrun and Induri ferries, which were established in 1877-78, at a cost of £116 (Rs. 1160) and £356 (Rs. 3560), all these ferries were established before 1875. The two ferries at Sangrun in Haveli and Chandgaon in Indapur work throughout the year, as the water there is always unfordable; the rest work during the

rainy season only. In 1881-82, the thirteen public ferries yielded a revenue of about £388 (Rs. 3880) against £437 (Rs. 4370) in 1874-75 During the current year (1884-85) they have been farmed for £555 (Rs. 5550). Rules framed under the Ferry Act (II. of 1878) fix the fares for passengers, animals, carriages, and cradles. The sanctioned charges are: Passengers exclusive of children in arms \(^3\)4d. (\(^1\)2 a.) in second and 3%d. (1/4 a.) in third and fourth class ferries; four-wheeled carriages, 1s. (8 as.) in second, and 9d. (6 as.) in third and fourth class ferries; two-wheeled carriages, 9d. (6 as.) in second, 6d. (4 as.) in third, and 41/2d.(3 as.) in fourth class ferries; laden ponies, horned cattle, and mules, 3d. (2 as.) in second, and 11/2d. (1 a.) in third and fourth class ferries; unladen ponies, horned cattle, and mules, and asses, $1\frac{1}{2}d$. in second and 3d. (2 as.) in third and fourth class ferries; sheep and goats, $4\frac{1}{2}d$ (3 as.) in second and $1\frac{1}{2}d$. (1 a.) in third and fourth class ferries; palanguin with bearers 1s. (8 as.) in second and third and 6d. (4 as.) in fourth class ferries; and litters or palnas with bearers, 6d. (4 as.) in second and third and 3d. (2 as.) in fourth class ferries. Besides these there is one ferry at Netva in Junnar across the Pushpavati. It is maintained by local funds and passengers are carried free of charge. There are several private ferries, which, except the ferry across the Mula-Mutha below the Sangam bridge near Poona, work during the rains only. The ferry boats are generally built in Bombay or in Thana, but some have been made by men brought from Bombay in the public works workshops in Poona. They are built on the lines of ordinary boats, of wood brought from Kalikat, and at a cost varying from £100 (Rs. 1000) for a small boat to carry about fifty passengers to £330 (Rs. 3300) for a large ferry boat to carry horses and cattle as well as passengers. The most successful form of ferry boat is two boats, each twenty-two feet to thirty-seven feet long by 5½ to ten feet broad joined together by a top frame. The boat-men are Kolis by caste. Ferry boats are in many cases worked by flying bridges. A wire rope is hung from bank to bank above water level with a pully working on it to which the boat is attached, and, being kept at an angle to the run of the stream, goes across by the pressure of the stream water against the boat, the pulley sliding along the iron rope and so bringing the boat straight across the river.

REST-HOUSES.

Besides five European travellers' bungalows, ten district revenue officers' bungalows, and nine public works bungalows, there are 156 rest-houses or *dharmshalas*, for the use of native travellers, and five for the use of troops. Of the five European travellers' bungalows, four, at Lonikand, Kondhapuri, Sirur or, Ghodnadi, and Dhond, are on the

Poona-Ahmadnagar road, and one at Khandala is on the Poona-Panvel road. Of the ten district; revenue officers' bungalows, one is at Otur in Junnar, one all Chakan in Khed, one at Sasvad in Purandhar, one at Loni Kalbhat in Haveli, three at Ravangaon Supa and Yevat in Bhimthadi, and three at Indapur Kumbhargaon and Loni in Indapur. Of the nine public works bungalows, two at Karla and Vadgaon are on the; Poona-Bombay road; one near the Nira bridge is on the old Poona- Satara road; one at Pargaon on the Sirur-Nira bridge road; one at Baramati on the Indapur-Nimbat road; one at Vir on the Nira-canal head-works road; one at Narayangaon on the Poona-Nasik road; and two at Patas and Bhigvan on the Poona-Sholapur road., Of the 156 rest-houses or dharmshalas for the use of native passengers, all of which are not situated on high roads nine are in Junnar, four at Khubi, Dingora, Rajuri, and; Belhe on the Malsej-Ana pass road, and three at Kalamb,; Narayangaon, and Junnar on the Poona-Nasik road; thirty are in Khed, none on any highroad; eleven are in Maval, five at Talegaon, Vadgaon, Khadkala, Valavhan, and Khandala on the Poona-Bombay road; eighteen are in Sirur, four at Koregaon Shikrapur; Kondhapuri, and Ganpati's Ranjangaon on the Poona-Ahmadnagar road; twenty-six are in Haveli, two at Vagholi and Lonikhand on the Poona-Ahmadnagar road, one at Shivapur on the new Poona-Satara road, one at Bhosri on the Poona-Nasik road, one at Dapuri on the Poona-Panvel road, and one at Urali Kanchan on the Poona-Sholapur road; seventeen are in Purandhar, two at Sasvad and; Jejuri on the old and one at Kikvi on the new Poona-Satara road, thirty-two are in Bhimthadi, five of them at Yevat, Kedgaon, Patas, Dhond, and Ravangaon on the Poona-Sholapur road; and thirteen are in Indapur, five of them at Bhigvan, Daij, Loni, and Indapur, on the Poona-Sholapur road, and three at Nimbgaon-Ketki, Lasurna, and Sansar, on the Indapur-Baramati road. There are also 354 village offices or chavdis which are used by native travellers as rest-houses in villages which have no other resting places. Of the five rest-houses for the use of troops, two, at Vadgaon and Khandala, are on the Poona-Bombay road, one at Lonikand is on the Poona-Nasik road, and two at Kondhapuri and Sirur (Ghodnadi) are on the Poona-Ahmadnagar road.

TOLLS.

The district roads have nineteen toll-bars, thirteen of them on provincial roads and six on local fund roads. Of the thirteen provincial toll-bars, six at Khadkala with a sub-toll at Takvi, Dapuri, Hadapsar, Yevat, Kumbhargaon, and Indapur, are on the Poona-Sholapur road; two, at Katraj and Kikvi, are on the new Satara road; two, at Lonikand with a sub-toll at Vagholi and Ranjangaon, are on the Poona-Sirur

road; and three, at Kurali, Peth, and Narayangaon, are on the Poona-Nasik road. Of the six local fund toll-bars one is at the Nira Bridge on the old Satara road, one at Hingne-Khurd on the Poona-Sinhgad road, one at Bhugaon on the Poona-Paud road, one at Shetphal-gadhe on the Baramati-Khanoti road, one at Khalumba on the Vadgaon-Shikrapur road, and one at Aund with a sub-toll at Banera on the Aund-Shelarvadi road. All the toll-bars, both on provincial and local fund roads, are sold every year by auction to contractors. In 1881-85 the auction bids amounted to £7430 (Rs. 74,300) for tolls on provincial roads and £2344 (Rs.23,440) for tolls on local fund roads, or £9774 (Rs. 97,740) in all.

RAILWAY.

During the last quarter of a century communications have been greatly improved not only by making roads, but also by opening the Great Indian Peninsula Railway which for 106 miles passes through the district from west to east. It enters the district at Khandala near the crest of the Sahyadris which is about 2000 feet above the level of the sea. For about twenty miles the line runs through a rough and hilly country. It next passes through the fertile plain lying between the Indrayani and Pauna rivers twenty-one miles south-east to Poona. From Poona its course is east along the valleys of the Mula-Mutha and Bhima, forty-eight miles to Dhond, and then south-east, seventeen miles to Diksal, where it enters Sholapur. It has eighteen stations: Khandala seventy-seven miles from Bombay, Lonavla 79½ miles, Karla 84½ miles, Khadkala 89½ miles, Vadgaon ninety-six miles, Talegaon-Dabhade ninety-eight miles, Shelarvadi 104 miles, Chinchvad 109 miles, Kirkee 115¼ miles, Poona 119 miles, Loni 129½ miles, Urali 137 miles, Yevat 145 miles, Kedgaon 152½ miles, Patas 159 miles, Dhond 165½ miles, Boribyal 172¼ miles, and Diksal 183¼ miles. The line was begun in 1850 and the section from Khandala to Poona was opened for traffic on the 14th of June 1858 and from Poona to Diksal on the 15th December of the same year. From Dhond, which is on the Poona frontier, runs the Dhond and Manmad State Railway, the chord line which joins the north-east and south-east sections of the Great Indian Peninsula Railway. This line from Dhond to Ahmadnagar was opened on the 16th March 1878. Dhond is the only station on the line within Poona limits. Throughout the district the Peninsula railway line was easily made. Khandala, which is provided with a safety siding, is the fourth and Lonavla is the fifth station on the Bor pass incline. The Bor incline begins at Karjat station near the village of Palasdhari, sixtytwo miles from Bombay and 206 feet above mean sea level. As the crest of the ascent is 2027 feet, the height of the incline is 1831 feet

and the distance fifteen miles, or an average gradient of one in fortysix. At Thakurvada the first station, about six miles from the bottom, safety sidings are provided, into which any train can be turned and stopped. The next station is at the Battery hill and the third is at the reversing station at the eleventh mile, where, by means of a siding, the train leant the station in the opposite direction to which it entered. This change is very ad-vantageous at this particular point. It allows the line to be laid in the best direction as regards gradients and works, and raises its level at the steepest part of the precipice. The fourth station is at Khandala at the thirteenth mile, where also a safety siding is provided, and the fifth is at Lonavla on the crest. Khandala and Lonavla an within Poona limits. On leaving Palasdhari or Karjat the line keeps to the western flank of the great Songiri spur. In the first four miles are very heavy works, which a second survey showed to be necessary to reduce the gradients that were first laid out. Some heavy embankments bring the line through the first mile. It then keeps round the Songiri hill, passing on its course through six tunnels of 66,132, 121, 29, 136, and 143 yards. Then bending north with very heavy works the line climbs round the Mahukimalli and Khami hills to the station at Thakurvada, 61/4 miles. In the last two miles there are eight tunnels of 286, 291, 282, 49, 140, 50, 437, and 105 yards and five viaducts which though not very long are very lofty All except the last are of masonry, with fifty-feet arches, one viaduct having eight, one six, and two four openings. The fifth viaduct, originally of eight fiftyfeet arches, was replaced by two Warren girders of 202 feet span. The least height of pier is seventy-seven feet, two are ninety-eight, one 129, and one 143. Leaving this section of tunnels, for two miles beyond the Khami hill, the line runs along a natural terrace or case in the rock without any obstacle, as far as Gambhirnath where the terrace is cut by two sheer rocky ravines. Crossing these ravines by two small viaducts, one with six forty-feet and the other with four thirty-feet arches, with piers forty-eight and eighty-eight feet high, the line keeps along the same cess for two miles to the bold outstanding rock called Nathacha Dongar. In the last two miles are heavy works, nine tunnels of 81, 198, 55, 63, 126, 79, 71, 280 and 121 yards. Beyond this the railway enters on the long and fairly level neck that forms the link between the Songiri spur and the main range of the Sahyadris. At the end of this neck, 11½ miles from the foot is the reversing station, which was considered the best arrangement for surmounting the last great difficulty on the incline, the ascent of the scarp of the Sahyadri face. By means of the reversing station the line is taken up the remaining five miles by gradients of one in thirtyseven, one in forty, and one in fifty, with two tunnels of 346 and of sixty-two yards, and with a viaduct of one sixty-feet and eleven forty-

feet arches. The line leaves the reversing station by a curve of fifteen chains on a gradient of one in seventy-five, pierces Elphinstone Point by a long tunnel of 346 yards, keeps along the edge of the great Khandala ravine, reaches the hollow where is Khandala station, and then, following the course of the Khandala ravine, crests the Sahyadris at the village of Lonavla. Besides the leading viaducts the incline has twenty-two bridges of seven to thirty-feet span and eighty-one culverts two to six feet wide. The total cutting, chiefly through rock, is two millions of cubic yards and the greatest depth is, on the central line, seventy-six feet, and, on the faces of the tunnel through Elphinstone Point, 150 feet. The cubic contents of the embankments are 2½ millions of yards, the greatest height of bank on the central line being seventy-five feet, though many of the outer slopes are 150 and some' of them are as much as 300 feet. There are in all twenty-six tunnels, of a total length of 3986 yards or more than 21/4 miles, six of them being more or less lined with masonry for a total length of 312 yards. There are eight viaducts. The length of the incline is fifteen miles and sixty-eight chains, of which five miles and thirty-four chains are straight and ten miles and thirty-four chains curved. The sharpest curves are one of fifteen chains radius for a length of twenty-two chains, and another of twenty chains radius for twenty-eight chains. Between a radius of twenty and of thirty chains there are curves of a total length of one mile and forty-eight chains, and the rest have a radius of between thirty-three and eighty chains. The steepest gradients are one in thirty-seven for one mile and thirty-eight chains. and one in forty for eight-miles and four chains the remainder being between one in forty-two and one in seventy-five. The only exceptions are one in 330 for twenty-three chains and a level of one mile and fifteen chains. The line is doable throughout. It cost £68,750 (Rs. 6,87,000) a mile or about £1,100,000 (Rs. 1,10,00,000) in all. The tunnels were the most difficult part of the work. Nearly all were of very hard trap. The steep forms of the hills prevented shafts being sunk, and, as the drifts had to be made solely from the ends, much skill and care were required in setting out the work on the sharply-curved incliaes, so as to ensure perfectly true junctions. The viaducts are partly of block in coarse masonry, as abundance of admirable building stone was everywhere at hand. But the masonry work was not good, and there have been some failures, chiefly the Mahukimalli viaduct which had to be rebuilt. Another cause of danger and trouble is the slipping of rain-loosened boulders. To ensure its safety all boulders had to be moved from the hill rides above the line. The land slips were particularly troublesome in the lower part of the incline. Shortly after the first engine passed, on the 30th March 1862, the whole of one of

the open cuttings, near the foot of the incline, was filled and had to be pierced by a tunnel of arched masonry.

The incline took seven years and a quarter to complete. It was carried out entirely by contract. The contract was first let to Mr. Faviell in the autumn of 1855, and the works were begun on the 24th January 1856. In June 1858, two miles of the upper part of the incline, from Khandala to Lonavla were opened for traffic. In March 1859, Mr. Faviell gave up his contract; and, for a short time, the Company's engineers carried on the works. In the same year the contract was relet to Mr. Tredwell. But be died within fifteen days of landing in India, and the work was completed by Messrs. Adamson and Clowser, managers for the contractor Mrs. Tredwell. These gentlemen carried on the work with the greatest zeal and ability. Their good and liberal management collected and kept on the work a force of 25,000 men during two seasons, and in 1861 of more than 42,000 men.

The rails used on the incline weigh eighty-five pounds to the yard, and were made With special care so as to secure hardness and flexibility. Under the fish-joints a Cast-iron chair, spiked to longitudinal timber bearers, is fixed se as to support the bottom of the rail and to give additional strength and security to the joint. The incline is worked by pairs of double-tank engines of great strength and power, Thana Statistical Account, Bombay Gazetteer, XIII 326-9,]

Besides ordinary buildings costing £250 to £1500 (Rs. 2500 - 15,000) with quarters for a station-master and a booking office and waiting rooms, at Khandala, Khadkala, Talegaon, Kirkee, Poona, Urali, Kedgaon, Patas, and Dhond, and refreshment-rooms at Poona and Dhond a large staation has been built at Lonavla at a cost of £30,000 (Rs. 3,00000) with large waiting and refreshament rooms. Workshops have also been constructed at Lonavla as well as a church, a school, a library, and quarters for the engine drivers and other servants of the company. As the water of the Indrayani which runs outside the Lonavla station-yard, was insufficient during the hot weather, a reservoir was built at a considerable cost at Bhushi about two miles to the south of Lonavla from which an abundant supply of fresh water is now available. The water is carried by cast-iron pipes to Lonavla, Khandala, and to the reversing station. The company has lately agreed to supply the village of Lonavla with water, the cost of the connection being borne by Municipal and Local Funds.

Since it was opened large quantities of goods have been drawn to the railway. Much traffic which used to go down the rough tracks of the

Sahyadris from Junnar and Khed now finds its way by the Nasik highroad to the Talegaon railway station. Much of the export trade which used to go to Bombay along the old Satara, Sholapur, and Ahmadnagar roads through Poona is now attracted to the nearest, railway station. At the same time the ordinary roads are by no means abandoned. Baramati and Indapur, the large markets in the east of the district, though only seventeen and twelve miles from the railway, have a direct road trade with Bombay and keep up the relatively high position they enjoyed before the railway. The railway has increased competition by throwing open the local trade as it were to the whole of India and has almost defeated combinations to keep up the price of grain or other articles of general local use. The merchants complain that though trade has greatly increased, profits have greatly fallen.

The making of the Western Deccan section of the Southern Maratha railway was sanctioned in December 1883, and the work was begun in March 1884. Of the whole length of 242 miles, 45½ mileslie within Poona limits. The line starts from Poona, 11934 miles from Bombay, and for about ten miles runs almost parallel to the Peninsula railway at a distance of about three miles to the south Near Loni, ten miles east of Poona, the line turns more to the south and skirts the Sinhgad-Bholeshvar range, rising with a ruling gradient of one in a hundred till it crests the Bhor incline about twenty-one miles south-east of and about 675 feet above the Poona railway station. Prom the top of the pass the line turns south, and, leaving Sasvad about eight miles to the west, passes almost straight south Jejuri thirty-two miles south-east of Poona. At Jejuri it crosses the Purandhar hills, and runs generally southwards till near Nimbat 45½ miles from Poona, it crosses the Nira river about three miles west of the Poona-Tasgaon road and enters Satara. The country over which the line passes is a series of parallel hills, running east and west, and divided by more or less wide valleys which slope from west to east. This section of the line will be difficult and costly. The great length of hill line involves heavy gradients, many curves and tunnels, and much bridging and walling. Not counting the terminus at Poona there will be four third class stations. Phursangi ten miles from Poona, Vaghpur twenty-four miles, Jejuri 32 miles, and Vala forty-one miles. The ruling gradient will be one in a hundred throughout and the sharpest curve will be above 500 feet radius. As good stone is plentiful, all the bridges are intended to be arched. The important bridges will be the Karha bridge, twenty-nine miles from Poona, with five fifty-foot arches and an estimated cost of £7300 (Rs. 73,000), and the Nira bridge, 46½ miles from Poona, with eight fiftyfoot arches, at an estimated cost of £8700 (Rs. 87,000). There will be two tunnel in the Bhor incline, one 500 feet long estimated to cost

£11,400 (Rs. 1,14,000) and the other 600 feet long estimated to cost £13,700 (Rs. 1,37,000). There will be about 63,832.cubic feet of retaining wall on the Bhor pass, costing about £2820 (Rs. 28,200). The permanent way will cost about £1890 (Rs. 18,900) a mile. The estimated cost of the whole Western Deccan section is £8300 (Rs. 83,000) a mile.

POST OFFICES.

The district of Poona forms a part of the Poona postal division Besides the chief receiving and disbursing office at Poona, the district contains thirty sub-offices, two of them in Poona, and twenty-four village post offices. The chief disbursing office at Poona is in charge of a postmaster, who draws a yearly salary of £300 (Rs. 3000) rising to £360 (Rs.3600). The two Poona sub-offices, one in the city and another in the New Bazar, and the twenty-eight sub-offices, at Dhond, Baramati, Chakan, Chinchvad Diksal, Ghoda, Indapur, Jejuri, Junnar, Kedgaon, Khadkala, Khandala, Khed, Kirkee, Lonavala, Mahalunga, Manchar, Narayangaon, Patas, Purandhar, Sasvad, Sirur, Supa, Talegaon-Dabhade, Talegaon-Damdhera, Otur, Vadgaon, and Kirkee Bazar, are in charge of sub-postmasters drawing yearly salaries varying from £18 (Rs.180) to £72 (Rs. 720). The twenty-four village post offices, at Ale, Alandi, Alegaon, Avsari, Avsari Budrukh, Belhe, Chas, Davdi, Kadus, Kalamb, Kikvi, Malthan, Morgaon, Narsingpur, Nimbgaon, Pabal, Parincha, Paud, Peth, Pimpalvandi, Rajuri, Vada, Valha, and Vaphgaon are in charge of village schoolmasters who receive yearly allowances varying from £3 (Rs. 30) to £6 (Rs. 60). There are fifty-six postmen for delivery of correspondence. Of these, one receives £18 (Rs. 180) a year, eleven receive £14 8s. (Rs. 144) a year, and the remainder £9 12s. (Rs. 96) a year. Gratuities to runners for delivering letters at some of the villages vary from £1 4s. to £2 8s. (Rs. 12-24) a year. Seventy one village postmen deliver letters at small villages. Of these twenty-four, receiving yearly salaries of £10 16s. (Rs. 108) each and thirteen of £12 (Rs. 120), are paid from Imperial, and eighteen receiving yearly salaries of £12 Rs. 120) and sixteen of £10 16s. (Rs. 108) are paid from provincial funds. At the village post offices only money-orders are issued and at the other post offices both money order and savings' bank business is carried on. Mails for the district of Poona to and from Bombay are carried by the Peninsula railway. A ponycart post runs between Sirur and Kedgaon and another from Poona to Satara, Kolhapur, and Belgaum. The disbursing post office and the town sub,-offices are directly subordinate to the disbursing postmaster of Poona. The sub-office at Dhond and the village post office at Narsingpur are under the supervision of the superintendent of post offices Ahmadnagar division, and the village post office at Kikvi is under the superintendent of the Deccan division. The remaining offices are supervised by the superintendent of post offices Poona division whose head-quarters are at Poona, and who is paid a yearly salary of £480 (Rs. 4800) rising to £600 (Rs. 6000) in five years. He is helped in the Poona district by an inspector whose head-quarters are at Poona and whose yearly salary is £120 (Rs. 1200) paid from provincial funds.

Besides the Peninsula railway telegraph offices there is one Government telegraph office at Poona.

section ii.-TRADE

CHANGES.

Of late years, except the development caused by cheap and rapid Carriage, there has been no marked change in trade. Among the people there is a growing fondness for foreign articles of dress and comfort. Husbandmen also show more intelligence in meeting the demand for particular produce. Of late years the great increase in the demand for oilseeds and raw sugar has led to a large increase in their production and export. This increase has been made possible by the opening of canals and other water-works. The oilseeds go chiefly to Bombay and the raw sugar to Bombay and Gujarat.

TRADE COURSE

Traffic passes from and to the Sirur sub-division by the Poona-Ahmadnagar road to Poona or to Kedgaon and so by all to Bombay; it passes from and to the Indapur sub-division by the Poona-Sholapur road to Poona or by rail from Chandgaon or Diksal to Bombay, it passes from and to the Bhimthadi sub-division by the Baramati-Nira bridge on the Jejuri road to Poona. by the Sholapur road to Poona, or by rail to Bombay from Dhond or Patas; it passes from and to the Purandhar sub-division by the old Satara road to Poona and thence by rail to Bombay, or by the new Satara road to Poona and thence by rail to Bombay; it passes from and to the Haveli sub-division by the Poona-Sholapur road, by the Poona-Ahmadnagar road, by the new Satara road to Poona by the Poona-Panvel road and by the Paud road to Poona, and thence by rail to Bombay: it passes from and to the Maval sub-division by rail at Talegaon, Lonavla, or Khandala to Bombay; it passes from and to the Khed and Junnar sub-divisions by the Poona-Nasik road to Poona or by the branch from the Nasik road to Talegaon and thence by rail to Bombay.

TRADE CENTRES.

The chief agencies for spreading imports and gathering exports are trade centres, markets, fairs, village shops, and peddler's packs. The chief trade centres are: Junnar, Narayangaon, and Ale in Junnar; Khed, Manchar, Ghoda, Ambegaon, Avsari, Vaphgaon, Pimpalgaon, and Mahalunga in Khed; Sirur and Talegaon-Dhamdhere in Sirur; Khandala and Talegaon-Dabhade in Maval; Poona, Charholi-Budruk, Phulgaon, Paud, Vagholi, and Loni Kalbhar in Havel; Sasvad and Jejuri in Purandhar; Supa, Baramati, and Patas in Bhimthadi; and Indapur. Of those Khandala, Talegaon-Dabhade, Poona, Loni Kalbhar, and Patas are on the Peninsula railway.

The leading merchants are Marwar Vauis, Gujarat Vanis, Bohoras, Parsis, and Brahmans, with capitals of £100 to £15,000 (Rs. 1000-1,50,000). Except Junnar, Ambegaon, Talegaon-Dabhade, Poona, Charholi-Budruk, Sasvad, Baramati, and Indapur, which trade direct with Bombay and other large markets, the trade; of the other centres is mostly local, not passing to places outside of the district. The merchants that deal direct with Bombay and other large markets are generally Marwar Vanis and Bohoras. They export grain and other produce, principally garden crops, and import hard-ware country and European piece-goods, haberdashery, stationery, dried fish, salt, rice, and cocoanuts. The same merchants deal both in imports and exports. Though every branch of trade is open to all classes, Bohoras have practically a monopoly of the hardware trade, and most of the larger grain-dealers are either Marwar or Gujarat Vanis. In the different local trade centres, though they do business only on a small scale, the traders are independent it. Regular trading is not generally carried on through agents but large traders occasionally make use of the services of agents when they are unable themselves to make purchases either in the villages or in Poona and Bombay. Field produce passes through several hands before it leaves the district. It goes to market generally through the village shopkeeper, who passes it on to a dealer in some large town, who sends it direct to Bombay or to some export merchant in Poona. Some rich landholders, but these are exceptions, themselves bring their produce to the large markets of Poona and Junnar. Tirgul Brahmans and Malis, who generally grow betel leaves vegetables and fruit, send the produce of their gardens to Poona or to Bombay. The village shopkeeper generally gathers articles of export in exchange for money advanced or lent. Like exports, imported articles pass through several hands, the wholesale merchant in Bombay, the importer in Poona or other local centre, the dealer who bays from the importer, and the petty retailer who bays from the dealer and sells at his village

shop or at some fair or market. In Poona itself imported articles sometimes pass through two hands only, the wholesale merchant in Bombay and the importer if he is also a retail merchant. The consumer, rarely buys from the importer. Occasionally another middleman the wandering peddler, comes between the consumer and the importer.

The brokers are mostly Lingayats but a few are Gujarat and Marwar Vanis, Marathas, Kachhis, and Muhammadans. Their number is small, perhaps about a hundred. They are usually paid three per cent. ($\frac{1}{2}a$.) in bill transactions and $\frac{1}{2}d$. to 3d. (1-2 as.) on the palla of 120 shers in corn transactions. In cloth purchases their brokerage is as much as two per cent, and in dealings in gold and silver ornaments it is a quarter per cent. As a rule brokers carry on no other business, but there is no rule or custom to prevent their engaging in other business, nor are their transactions limited to any one branch of trade.

MARKET TOWNS.

Next to the chief trade centres in the spreading and gathering of goods come the market towns, where a market is held on a fixed day in the week. Of forty-four villages where weekly markets are held, six, Ale, Anne, Junnar, Madh, Narayangaon, and Otur, are in Junnar; nine, Ahire, Ambegaon, Chakan, Ghode, Khed, Mahalunge, Manchar, Vade, and Vaphgaon, are in Khed; ten, Ambegaon, Chandkhed, Karla, Nana, Nilshi, Shivane, Takvi-Bndrukh, Tale-gaon-Dabhade, Umbre, and Vadgaon, are in Maval; five, Bhamburda, Bhorkas, Ghotavde, Mulshi, and Paud are in Haveli; six, Ghodnadi, Kavthe, Kendur, Malthan, Pabal, and Talegaon-Dhamdhere are in Sirur; four, Kikvi, Parinche, Sasvad, and Valhe are in Purandhar; five, Baramati and Dhond, and Patas, Karkamb and Yevat on the Poona-Sholapur road, are in Bhimthadi; and four, Bhigvan, Indapur, Nimbgaon-Ketki, and Palasdev are in Indapur. Of these the most important are Baramati, Bhamburde, Dhond, Ghodnadi, Ghotavde, Junnar, Manchar, Sasvad, and Talegaon-Dhamdhere, with an attendance of 150 to 700 sellers and 500 to 2500 buyers. In the rest the attendance varies from twenty-five to 150 sellers and from forty to 200 buyers. All these markets are distributing centres, and about one-sixth, Baramati, Ghodnadi, Indapur, Junnar, Khed, Sasvad, and Talegaon-Dhamdhere are also gathering centres The chief articles brought for sale are grain of all sorts, cloth, vegetable and fruit, groceries, spices, and other articles of daily use. Besides these articles, shoes, ropes, brooms, baskets, and blankets are offered for sale at Bararnati and Sasvad, and cotton at Indapur. The sellers are Vanis, Malis, Momins, Kachhis, Tambats, Tambolis,

confectioners, Mangs, Kolis, and others, some of them producers and others either dealers or dealers' agents, belonging to the market town or to some neighbouring village. The buyers are people of all castes in the market town and in the neighbouring villages. There is no barter except that small landholders and others, including Mhars, Mangs, Chambhars, Ramoshis, Kolis, and Musalmans, who have no money, receive oil, tobacco, vegetables, chillies, and fish in exchange for grain. Cattle markets are held at Ghodnadi, Manchar, Indapur, Baramati, and Junnar once a week, and at Bhamburde near Poona a half-weekly cattle market is held on Wednesdays and Sundays. Horses, ponies, cows, buffaloes, sheep, and goats are brought for sale by Kunbis and others. The chief buyers are Kunbi and other landholders, and butchers at the Bhamburde market.

FAIRS.

Of sixty-five yearly fairs, seven, at Ale, Otur, Nimdari, Ojhar, and Narayangaon, Belhe and Hivre, are held in Junnar; eight, at Nimbgaon-Ketki (twice), Kharpadi, Kelgaon, Chakan, Kadadhe, Dhamne, and Bhovargiri (Bhimashankar) in Khed; two at Vehergaon and Vadgaon in Maval; eighteen at Bhamburde (twice), Pashan, Parvati (twice), Higne Khurd, Kondhanpur, Vadi, Bolhai, Dehu, Chinchvad, Ravet, Paud, Ghotavde, Shera, Tamanhi-Budruk, Vadgaon, Aksai, and Niva in Haveli; eleven, at Shirasgaon, Vadgaon, Mandavgan, Ranjangaon, Malthan, Mukhai, Pimple, Jambut, Kavthe, Talegaon-Dhamdhere, and Kanhur in Sirur; ten, at Sasvad (twice), Jejuri (four times), Pur, Vir, Malshiras, and Diva in Purandhar; eight, at Valki, Pargaon, Nangaon, Varvand, Supa, Dhond, and Morgaon (twice) in Bhimthadi; and one at Narsingpur in Indapur. All of these, except those at Belhe and Hivre in Junnar which are chiefly attended by Musalmans, are Hindu fairs held in honour of some local deity. The attendance varies from 200 to 25,000. Large dealers do not attend and there is not much trade, the estimated value of articles sold generally varying from £1 to £40 (Rs. 10-400). At Dhond, Morgaon, Jejuri, Vir, Malshiras, Nimbgaon-Ketki, Bhovargiri, Vehargaon, Kondhanpur, Vadgaon, and Aksai, the transactions amount to not less than £100 (Rs. 1000), and sometimes to as much as £2500 (Rs. 25,000). The usual salesmen are sweetmeat-makers, gardeners, and grain-parchers, but coppersmiths, weavers, tailors, grocers, tasselmakers, and betel-leaf growers generally attend some of the larger fairs with stocks of metal vessels, cloth, bangles, blankets, groceries, oil, and clarified butter and spices. The buyers are consumers, villagers from the neighbourhood, and pilgrims. Occasionally Mhars,

Kolis, and some Kunbis exchange grain and fuel for oil, salt, and chillies. Otherwise there is no barter.

VILLAGE SHOPKEPPERS.

Except small groups of huts in the hills every village has its shopkeeper. The village shopkeeper is usually a Gujarat or a Marwar Vani, but sometimes a Lingayat Vani, a Teli, and occasionally a Kunbi or Musalman. Except grain which he buys from local owners, the village shopkeeper draws his stock in trade from the large towns with which he has business relations, and where probably the moneylender, on whom he is often dependent, lives. His stock in trade generally includes grain, groceries, raw and refined sugar, salt, oil, and; clarified butter tup, spices, cocoanuts, and all other articles required for daily use by the people. Though every shopkeeper does not keep a store of cloth, it is not necessary to go to the sub-divisional centre to buy cloth. In each sub-division ten or twelve villages have; cloth shops. Except in the western hills cloth can be bought in one village out of every ten. Cloth can also be bought at all weekly markets. Besides robes or *lugdis*, waistcloths or *dhotars*, and strong *dongri* cloth woven in the district at Baramati, Junnar, Sasvad, Kavthe, and Indapur, the cloth-merchants have stocks of Bombay and European cloth which they generally buy in Bombay. Cloth is bought by people of all castes from the village in which the shop is as well as from villages near which have no shop. Shop-keepers sometimes exchange their wares for grain to Kunbis and other poor people who have no ready money. The village shop-keepers have usually moneylending dealings with people of all castes, except Brahmans, in the village as well as in the neighbour hood. They have no connection with large trading firms. They themselves or sometimes their agents or relations go to fairs and market towns.

PEDDLERS.

Below the village shopkeepers come the travelling peddlers, who are generally Gujarat Marwar or Lingayat Vanis, Shimpis, Malis, Bagvans, Kasars, Sonars, Sangars, Tambolis, Telis, Atars, Bairagis, and Komtis. They have their head-quarters at Poona or some other large town where they buy or prepare the contents of their packs They carry their goods on horse or bullock back and sometimes on their own shoulders. They go from village to village and visit the market towns and fairs within their circuit, and are known to their customers. Vanis take groceries and spices; Shimpis cloth and ready made clothes; Malis fruit and vegetables; Bagvans groceries, spices, and vegetables; Kasars,

Bairagis, and Komtis metal vessels and dishes, and the other Kasars bangles; Sonars cheap ornaments; Sangars blankets; Tambolis betel leaves and nuts; and Telis oil. Cloth is also hawked about by Musalman peddlers who of late have been hawking perfumes and pearls. All these except the last sell their goods on credit or for cash to Kunbis, Musalmans, Mhars, Mings, and others. The sale of perfumes and pearls is restricted to the higher classes and to cash payments only. Malis, Bagvans, and sometimes Vanis barter their goods with Kunbis and others for grain. Bairagis and Komtis sometimes exchange their goods for old clothes, lace borders of turbans, and other clothes. Except Malis and Bagvans, who travel throughout the year, the peddlers set out on their tour at the end of September or the beginning of October, and return before the rains.

IMPORTS.

Decrease in cost both of making and of carrying, and a larger margin of earnings among the bulk of the lower classes, have of late years led to a great increase in the amount of imports. The importers are chiefly Gujarat and Marwar Vanis. The chief imports are, grain including rice, bajri, jvari, wheat, pulses including gram tur hulga math udid and mug, oilseeds including earthnuts and khurasni, cotton seeds, moha Bassia latifolia flowers, salt, fish, metals, raw and refined sugar, tobacco, timber, hardware, indigo, twist, piece-goods and silk, matches, kerosine oil, haberdashery, porcelain, and European liquor Rice, which is used in small quantities only by the upper classes of Hindus, is brought from Ahmadnagar and Thana. Bajri is brought from Ahmadnagar and Sholapur, and *jvari*, hulga, math, udid, mug, tur, and gram are brought from Sholapar. Wheat, especially the excellent bakshi or garden wheat, comes from the Nizam's country, Sholapur, Khandesh, and Gujarat. Oilseeds are brought into Purandhar and the eastern subdivisions by Telis and the usual import traders from Ahmadnagar and Sholapur, and by Marathas, Musalman and Lingayat Vanis from Phaltan and Satara. Cotton seed, which are used for feeding milch-cows are brought from Ahmadnagar Khandesh and Sholapur. Moha flowers come from Thana, Ratnagiri Gujarat and Jabalpur, and are sold to liquor contractor, Salt which was formerly brought by pack-bullocks, now comes mostly by rail and a little by the Nana and Malsej passes from Thana. Dry fish are brought from Bombay and Thana by rail, and by the Nana pass by Musalmans, Bhois, and butchers. Under imported metals come gold, silver, copper, brass, iron, lead, zinc, and tin. During the American war large quantities of gold and silver found their way into the district. Most of the gold and silver, were, made into ornaments; the rest was hoarded.

During the 1876-77 famine a large quantity of gold and silver ornaments left the district chiefly to Bombay. Since the famine year better harvests have again started the import of silver and gold. Copper and brass were formerly imported in blocks and worked first into sheets and then into vessels. Of late years ready made sheets have been largely imported from Bombay and considerably lowered the price of brassware. Copper and brass ready-made cooking and drinking cups, of which there is a growing manufacture in the city of 'Poona are also brought from Nasik. They are used by all but the poorest classes. The import of iron has of late greatly increased and it is made in considerable quantities into water pails and butter and oil cans. Iron is also much used for cart tires and axles. All of it comes from Bombay, brought chiefly by Bohora Musalmana Imported groceries, chiefly dates cocoanuts and spices, are largely used by all classes. They are brought by rail as well as on pack-bullocks by the Nana and Malsej passes, from Bombay, and by rail from Sholapur. Refined sugar comes from Bombay, and raw sugar of which since the opening of the Mutha Canals a large quantity is produced in Haveli, is brought into Poona from Phaltan, Satara Kolhapur, and the Bombay Karnatak. In Poona city there is a large trade in raw sugar. During 1875-76 nearly 3750 tons (5260 khandis) valued at £45,236 (Rs. 4,52,360) were imported. A large proportion of the imports are exported chiefly to Ahmadabad. Tea and coffee which are used only by a few classes are brought from Bombay in small quantities. Tobacco is brought by Lingavat Vanis and Tambolis from Satara, Sholapur, Mirai, Sangli, and Kolhapur Malabar teak comes from Ratnagiri and Thana. Other timber also comes from Bhor, Nasik, and Thana. Indigo and silk are imported from Bombay by rail. English and Bombay cotton twist is brought by Bohoras and Gujarat Vanis and distributed over the district to handloom weavers. Of late the outturn of the Bombay factories has to a great extent taken the place of English yarn. Piece-goods are of two chief kinds, hand-made and steam-made. The hand-made goods, waistcloths, turbans, and women's robes, which are prepared in considerable quantities in the district at Sasvad are also brought from Burhanpur, Yeola, Ahmadnagar, Paithan Ahmadabad, and Nagpur. The machine-made piece-goods are Bombay coarse strong cloth, chiefly for waistcloths, sheets, and towels from Bombay, and European finer fabrics and prints brought by Bohoras and Gujarat Varus from Bombay. Of late years, except during the 1876-77 famine, the import of steam-made piece-goods has rapidly increased, the cheapness both of Manchester and of Bombay goods stimulating the trade. Silks, like piece-goods, are of two kinds, machine and hand made. There is littlelocal demand for steam-made European silks, but the produce of the Bombay silk mills is gradually taking the place of hand-made silks.

Hand-made silks, chiefly turbans, scarfs, and bodice-cloths, from Burhanpur, Yeola, and Paithan, and broeades from Surat and Ahmadabad, an brought into the district by Marwar and Gujarat Varus, Bohoras, and tailors, The chief dealers in silks are Marwar and Gujarat Vanis, Bohoras, Momins, and Patvegars. No class of merchants deals exclusively in silks, but almost all rich merchants keep silk fabrics in stock. Carpets or *satranjis* are brought from Agra, Ahmadnagar, and Khandesh. Glassware-chiefly China bangles are brought by Kasars and other glass articles by Bohoras and other Musalmans. European liquor comes from Bombay. Of late the import of matches and of kerosune oil has greatly increased; they are now found even in small villages. Well-to-do Musalmans and Parsis have taken to use English furniture and China ware. The use of tea, coffee, and European liquor by wealthy Hindus has also become common.

EXPORTS.

Of Exports the chief are, of vegetable products, grain, cotton, raw sugar, vegetables, betel leaves, myrobalans, and roots and barks for dyeing; of animal products, honey, hides, and horns; and of manufactured articles, clarified butter, brassware, shoes, silk cloth, home-spun cotton cloth, ivory and wooden toys, and perfumes. Under grain, besides bajri and jvari, come wheat and gram. Since the opening of the railway the export of perishable produce has greatly increased. Among the chief branches of this trade are the export of betel leaves, vegetables, and fresh fruit from the Haveli and Purandhar sub-divisions, and of potatoes from Junnar and Khed. The trade is rapidly growing on account of the impetus given to market-gardening by irrigation from Lake Fife. Plantains are sent from Ale, Otur, and Junnar to Bombay by Talegaon, also from Valha in Purandhar by the old Satara road to Poona. Grapes are sent from Vadgaon, Kandali, Rajuri in Junnar, and from Pabal and Kendur in Sirur. Figs are sent from Diva, Parincha, Sonavri, Gurholi, Mahur in Purandhar, and from Gogalvadi and Alandi-Chorachi in Haveli. Pomegranates are sent from Supa, Devalgaon, Gadag, Vadgaon in Bhimthadi, and from Alandi-Chorachi and Urali-Kanchan in Haveli. Mangoes are grown extensively at Khed Shivapur in Haveli, also at Sasvad, Chambli, Supa Khurd, Bhivri, and Bapgaon in Purandhar, and Ausari-Khurd and Kadus in Khed. In ordinary years small quantities find their way to Bombay. Oranges and guavas are grown at Kothrud, Yerandavna, Mundhva, Parbati, Mali, and Munjeri, and sent for sale to Poona. Limes are grown at Kurli, Parbati, Yerandavna, Vanavdi, and Mundhva. Potatoes are largely grown in the Khed sub-division, and from Khed as from Junnar they are sent by Talegaon. They are also sent from TalegaonDhamdhere and Pabal. Onions are sent from the Talegaon-Dabhade station. Chillies are sent by the same route from Kahu, Gulani, Vaphgaon, Chakan, Bhos in Khed, and from Khodad, Narayangaon, and Arvi in Junnar. Cabbages and other fresh vegetables, as green chillies, *ghevda* Dolichos lablab and *govari* Cyamopsis psoraliodes pods, and the young shoots of coriander or kothimbir go in considerable quantities to Bombay. In the village of Charholi-Budrukh on the Indrayani, upwards of £4000 (Rs. 40,000) are said to be invested in growing betel leaves. Betel leaves are also produced, principally by Marathas and Malis, in Belhe in Junnar, Parincha Mahur and Diva in Purandhar, Alandi and Dondi in Khed, Mahamadvadi and Vanavdi in Haveli, Nimbgaon-Ketki and Vihali in Indapur, and Vapanda in Bhimthadi. The trade in betel leaves is rapidly growing on account of the impetus given to market-gardening by irrigation from Lake Life. From the north of the district there is a considerable export of myrobalans to Bombay.

Colouring roots are prepared by Mhars, Mangs, Chambars, and Musalmans, and sold to Parsis, Dhors, and Musalmans who send them by rail to Bombay, Poona, Ahmadnagar, and other places. Bajri is sent from Haveli, Purandhar, Khed, and Junnar by cart to Poona by Marwar and Gujarat Vanis and cultivators. Jvari is sent from Indapur, Bhimthadi, and Sirur by rail and cart to Poona. Nearly three-fourths of the cotton grown is sent by rail from the eastern sub-divisions to Bombay by Bhatias and Marwar and Gujarat Vanis. Raw sugar, which is imported in large quantities, is also exported to Ahmadabad. Junnar hand-made paper was formerly largely exported, but of late the trade has much fallen. In Haveli metal-ware is made in large; quantities in the city of Poona by coppersmiths and others who send the articles by rail to Bombay and Sholapur, and by road to Satara, Kolhapur, and other places. In Junnar the metal-ware suffices only for local use. Indapur, Sirur, Maval, Bhimthadi Purandhar, and Haveli export hides, horns, and bones chiefly to Bombay and Poona, and Junnar, and Khed export hides and horns only. The dealers are generally Mangs, Mhars, Musalmans, and butchers. About 200 cartloads, each containing twenty hides, go every year from Junnar, and 100 cartloads from Khed each contain-ing twenty-five to thirty hides. Indapur sends about 500 mans of these articles, Purandhar about 500 to 1000 hides and 200 to 500 horns, and Haveli five to seven thousand hides. A Parsi has started a bone store at Bhamburde near Poona. In Junnar, the export of hides and horns is on the increase.

RAILWAY TRAFFIC.

A comparison of the Peninsula railway traffic returns, during the eight years ending 1880, [Detailed traffic returns are not available from 1881 to 1883] shows a rise in the number of passengers from 767,186 in 1873 to 1,140,136 in 1880, and in goods from 69,290 tons in 1873 to 112,682 tons in 1880 against 125,245 in 1878. The chief passenger station is Poona with an increase from 462,145 in 1873 to 593,897 in 1880 against 608,039 in 1878. Other important passenger stations with a comparatively small goods traffic are Dhond, the junction of the Peninsula railway and the Dhond-Manmad State railway, with an increase from 24,673 in 1873 to 135,699 in 1880; Talegaon with an increase from 63,071 in 1873 to 98,085 in 1880 against 103,751 in 1878; Lonavla with an increase from 44,837 in 1873 to 57,209 in 1880 against 60,441 in 1878; Chinchvad with a decrease from 44,017 in 1873 to 25,355 in 1880; Kirkee with an increase from 30,224 in 1873 to 41,309 in 1880 against 42,739 in 1878; Khandala with an increase from 13,115 in 1873 to 28,925 in 1880; and Khadkala with an increase from 19,127 in 1873 to 26,921 in 1880 against 26,935 in 1878. In 1880 the passenger traffic at the remaining stations varied from 5115 passengers at Boribyal to 23,138 at Diksal. Poona is also the chief goods station showing an increase from 47,220 tons in 1873 to 84,345 tons in 1880. Other important goods stations but with a comparatively small traffic are Talegaon with an increase from 5944 tons in 1873 to 10,732 tons in 1880; Dhond with an increase from 4599 tons in 1873 to 4758 in 1880 against 25,975 in 1878; Diksal with an increase from 1532 tons in 1873 to 4062 tons in 1880 against 4285 in 1878 Kirkee with a decrease from 4152 tons in 1873 to 3414 tons in 1880; and Lonavla with a decrease from 1530 tons in 1873 to 1252 in 1880. The goods traffic at the remaining stations in 1880 varied from 339 tons at Loni to 783 tons at Urali. There was no goods traffic at Karla, Vadgaon, Shelarvadi, Yevat, and Boribyal.

The following statement shows for each station the changes in traffic during the eight years ending 1880:

POONA PENINSULA RAILWAY, PASSENGER AND GOODS TRAFFIC, 1873, 1878, 1880.

| STATION. | MILS | 1873. | | 1878. | | 1880. | |
|----------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|
| | FROM Bombay | Passen- gers. | Tons of Goods. | Passen- gers. | Tons of Goods. | Passen- gers. | Tons of Goods. |
| Khandala | 77 | 13,115 | 2521 | 26,278 | 553 | 28,925 | 730 |

| Lonavla | 79½ | 44,837 | 1530 | 66,441 | 1132 | 57,209 | 1252 |
|------------|--------|---------|--------|-----------|---------|-----------|---------|
| Karla | 841/2 | | | 8352 | | 9138 | |
| Khadkala | 841⁄4 | 19,127 | 389 | 26,935 | 145 | 26,921 | 739 |
| Vadgaon | 96 | | | | | 6841 | |
| Talegaon | 98 | 63071 | 5944 | 103,751 | 4712 | 98,085 | 10,732 |
| Shelarvadi | 104 | | | | | 10,181 | |
| Chinchvad | 109 | 44,017 | 824 | 28,474 | 881 | 25,355 | 586 |
| Kirkee | 1151/4 | 30,224 | 4152 | 42,739 | 3775 | 41,309 | 3414 |
| Poona | 119 | 462,145 | 47,226 | 608,039 | 81,775 | 593,897 | 84,345 |
| Loni | 1291⁄2 | 6,902 | 56 | 12,704 | 448 | 12,621 | 339 |
| Urali | 137 | 13,501 | 278 | 18,164 | 483 | 20,819 | 783 |
| Yevat | 145 | | | 12,817 | | 12,014 | |
| Khedgaon | 152½ | 13,229 | 133 | 17,768 | 560 | 17,802 | 489 |
| Patas | 159 | 14,329 | 106 | 17,447 | 526 | 15,067 | 453 |
| Dhond | 165¼ | 24,673 | 4599 | 81,044 | 25,976 | 135,699 | 4758 |
| Boribyal | 1721/4 | | | 4989 | | 5115 | |
| Diksal | 183¼ | 18,016 | 1532 | 25,652 | 4285 | 23,138 | 4062 |
| Total | | 767,186 | 69,290 | 1,101,594 | 125,245 | 1,140,136 | 112,683 |

In the goods returns the chief changes are, under exports, an increase in fruits and vegetables from 8760 tons in 1873 to 13,736 tons in 1880 against 7186 tons in 1878; in sugar both raw and refined from 716 tons in 1873 to 2080 tons in 1878 and to 3595 tons in 1880; in grain from 1019 tons in 1873 to 7514 tons in 1878 and to 1797 tons in 1880; in metal from 678 in 1873 to 1573 in 1878 and to 1419 tons in 1880; in firewood from 101 tons in 1873 to 770 tons in 1878 and to 1172 tons in 1880; in oil from 213 tons in 1873 to 728 tons in 1878 and to 630 tons in 1880; in hides and horns from 259 in 1873 to 506 tons in 1878 and to 587 tons in 1880; in tobacco from eighteen tons in 1873 to fifty-two tons in 1878 and 227 tons in 1880; in linseed and sesamum oilseeds from eighty-two tons in 1873 to 126 tons in 1878 and to 104 in 1880; in cotton an increase from 1582 tons in 1873 to 2584 tons in 1878 and a decrease to 704 in 1880; a decrease in salt from 522 tons in 1873 to seventy-six tons in 1878 and to twentyseven tons in 1880 and in timber from 225 tons in 1873 to 100 tons in

1878 and to thirty-three tons in 1880. The other exports besides sundries, which amounted to 8394 tons, varied in 1880 from two tons of Europe twist to seventy-six tons of country piece-goods. Under imports there was an increase in grain from 18,077 tons in 1873 to 41,856 tons in 1878, and to 47,222 tons in 1880; in metal from 1902 tons in 1878 to 3774 tons in 1878, and a decrease to 3276 tons in 1880; in sugar both raw and refined an increase from 1146 in 1873 to 1496 tons in 1878, and a decrease to 1224 tons in 1880 probably due to the large production of raw-sugar in the district consequent on the increased cultivation of sugar-cane along the Khadakvasla canals; an increase in firewood from 128 tons in 1873 to 734 tons in 1878, and a decrease to 644 in 1880; in moha flowers from nothing in 1873 to 214 tons in 1878 and to 560 tons in 1880. There was only a slight increase in the imports of Europe piece-goods from 685 tons in 1873 to 742 in 1878 and to 774 tons in 1880; and in country piece-goods there was an increase from 721 tons in 1873 to 862 tons in 1878 but afterwards a decrease to 676 tons in 1880. In Europe twist there was a decrease from 364 tons in 1873 to 832 tons in 1878 and to 198 tons in 1880. In country twist there was an increase from 234 tons in 1873 to 342 in 1878 but afterwards a decrease to 244 tons in 1880. Other imports besides sundries, which amounted to 19,419 tons, consisted of cotton eleven tons and of wool ten tons. There was a decrease in fruits and vegetables from 1204 tons in 1873 to 1090 in 1878 and to 789 in 1880; in oilseeds from 1094 in 1873 to 680 in 1878, but afterwards an increase to 750 tons in 1880; in oil there was a decrease from 994 tons in 1873 to 806 in 1878, but a slight increase to 910 in 1880. The details are:

POONA PENINSULA RAILWAY GOODS TRAFFIC, 1873, 1878, 1880.

| ARTICLE | 187 | 73. | 18 | 78. | 1880. | |
|-----------|----------|---------|----------|---------|----------|---------|
| | Outward. | Inward. | Outward. | Inward. | Outward. | Inward. |
| | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Cotton | 1582 | 14 | 2584 | 2 | 704 | 11 |
| Fruit | 8760 | 1204 | 7186 | 1090 | 13,736 | 789 |
| Firewood | 101 | 128 | 770 | 734 | 1172 | 644 |
| Grain | 1019 | 18,077 | 7514 | 41,856 | 1797 | 47,222 |
| Hides and | 259 | 59 | 506 | 233 | 587 | 266 |

| Horns | | | | | | |
|------------------------------|--------|--------|--------|--------|--------|--------|
| Oilseed | 82 | 1094 | 126 | 680 | 104 | 750 |
| Metal | 678 | 1902 | 1573 | 3774 | 1419 | 3276 |
| <i>Moha</i> Flowers | | | 88 | 214 | 8 | 560 |
| Oil | 213 | 994 | 72 | 806 | 630 | 910 |
| Piece- goods, Europe | | 685 | 2 | 742 | 3 | 774 |
| " Country | 17 | 721 | 33 | 862 | 76 | 676 |
| Salt | 522 | 1170 | 76 | 1304 | 27 | 697 |
| Sugar, Raw and Refined | 716 | 1146 | 2080 | 1496 | 3595 | 1224 |
| Sundries | 7824 | 16,676 | 9863 | 34,625 | 8394 | 19,419 |
| Timber | 225 | 2774 | 100 | 2724 | 33 | 2402 |
| Twist, Europe | | 364 | 1 | 382 | 2 | 198 |
| Twist, Country | 2 | 234 | 2 | 342 | 28 | 244 |
| Tobacco | 18 | 19 | 52 | 218 | 227 | 56 |
| Wool | | 11 | 9 | 1 | 12 | 10 |
| Total | 22,018 | 47,272 | 33,213 | 92,032 | 32,554 | 80,128 |

At Dhond, the only station of the Dhond and Manmad railway within Poona limits, the traffic consisted of 29,264 in and 31,977 out passengers, and 610 tons of exports and 136 tons of imports in 1879 against 64,406 in and 61,440 out passengers and 4780 tons of exports and 112 tons of imports in 1880.

There are no trades-unions or *mahajans* in the district, nor is there any Nagarshet or recognized head in matters of trade. Dayaram Atmaram, a Vani, who died fifteen years ago and was the recognized head of the banking business, was the last Nagarshet of Poona.

Disputes between traders are frequently referred to the whole body of traders in any one branch of trade. The chief members form a committee or panch, and their decisions are always accepted. Formerly a few recognized head traders formed the panch in each trade, but here as elsewhere the levelling tendency of British rule has had its effect, and, except that petty dealers are not consulted and dp not expect to be asked to join a trades meeting, all the members of a trade have, and exercise, an equal right to appear at a meeting of a trade's panch. Regular strikes are unknown, but a falling market or scarcity of labour from time to time causes changes in wages. When any change has to be made the chief members of the trade meet the artisans and after discussion fix a revised rate. In this manner in 1881 a claim by the silk weavers for a rise in wages was settled in their favour after the matter was discussed with the silk merchants. The decisions of these committees have hitherto been accepted as final. At the same time there is no recognized means of enforcing them except that if an artisan refuses to work at the rate settled he receives no employment. So also traders will cease to deal with any member of their trade who refuses to abide by the decision of a trade committee or *panch*.

CRAFTS

[From materials supplied by Mr. B. A, Gupte, head Clerk Sir J, J, School of Art and Industry.]

Except cotton handloom weaving which to a small extent is carried on in thirty-seven towns and villages and some small metal work, silk weaving, and paper making at Junnar the industries of the district centre in the city of Poona. For Poona city details of twelve crafts have been collected. These are, in order of importance, the making of copper and brass vessels, the weaving of silk and cotton cloth, the making of gold and silver thread, glass bangles, ivory combs, clay figures, iron pots, felt and paper, tape weaving and wood turning. Of these the making of copper and brass vessels and the weaving of silk and cotton cloth with or without gold and silver thread are the most important and flourishing. Glass bangles, ivory combs, felt and tape are in good local demand. Poona clay figures are admired and are bought chiefly by Europeans. On account of their cheapness iron pots are taking the place of the large brass and copper vessels used for storing Water and grain. Paper making is declining and none of the woodturners work has more than a local sale.

BRASS WORK.

Workmen.

The Poona brass industry supports (1883) about seventy dealers and 2320 workers. This number includes 810 Tambats or makers of large articles, 500 Jingars or makers of small articles, 50 Otarist or casters, and 960 Kasars or brasiers. The hereditary copper brass and bellmetal workers of Poona, the Tambats, Jingars, Otaris, and Kasars are guiet easy-going people. All speak incorrect Marathi and live in one-storeyed houses of which seven belong to the Tambats, fifty or sixty to the Jingars, and thirty to the Otaris. They generally live on vegetable food, but are allowed to eat mutton and fish as well as to drink liquor which they take on holidays and special feasts. The Kasars and Tambats dress like Brahmans and the Jingars and Otaris like Marathas. As the demand for brass ware is brisk and growing, no Tambats, Jingars, Otaris, or Kasars have of late given up their hereditary craft. Within the last fifteen years their numbers have been more than doubled; by local Maratha Kunbis whom the high profits of brass working have drawn from the fields and the labour market but who so far confine themselves to the rough parts of the work. The hereditary coppersmith classes work from seven to ten or eleven and against from two to six. In the busy season, that is between November and May, they work extra hours even till midnight. Like other local Hindu craftsmen, Kasars stop work on the no-moon day or amavasya at the end of every lunar month, on kar the day after the Mahasankrant in January, for five days at Holi or Shimga in March-April, for two during Divali in October-November, and on the day after an eclipse either of the sun or of the moon. They also rest on Ganpati's Fourth in August and on Gauri's Day about the same time, and for ten days at Dasara in October. All rest on any day on which one of the community dies. They have no trade quild, but join in paying a half-yearly tax to the goddess Kalika for whom they have built a temple in Kasba ward which costs 14s. to 16s. (Rs.7-8) a month to keep up. The Kasar's Kali differs from other local Kalis in having camel supporters on each side of here instead of elephant supporters. Also instead of offering her a goat or buffalo, on the eighth day of the Navratra that is two days before Dasara, they offer her the false calabash gourd kohola Cucurbita lagenaria, which perhaps from its dark colour, is believed to be a transformed giant. Four pegs are driven into the fruit to represent legs and arms and it is cut with a sword, and thrown into the sacred fife. A little brass and bellmetal is smelted by the Jingars and Otaris but the bulk of the copper and brass comes in sheets about three feet by four by rail through Bombay chiefly from England and Australia. They are brought from Bombay by Marwar and Gujarat Vanis and given to be worked by Tambats. The sheets or brasiers are of three kinds, thick middle and

thin, which differ little in price as they are sold by weight. The copper costs £4 8s. to £4 10s. (Rs. 44-45), and the brass £3 8s. to £3 10s. (Rs. 34-35) the hundred-weight, with two shillings extra one for brokerage and one for carriage. A coppersmith has fifteen chief tools and appliances.

Tools.

A stone or dagad about three feet above and two feet under ground on which the copper and brass plates made by melting old broken pots are beaten. As it has to stand very rough usage this stone is chosen of flawless black basalt very carefully smoothed. One of these stones is said sometimes to cost as much as £10 (Rs. 100). Since the import of metal sheets has grown so common the stone has almost fallen into disuse: Five hammers or ghans worth 8s. (Rs. 4) each: A pair of bellows or bhatas worth 12s.(Rs. 6): Four iron hooks or orapnis each worth 6d. (4 as.): Four pairs of tongs or sandsi worth 108. (Rs. 5): An anvil called sandhan or mekh, a long upright iron bar polished at one end on which the pot is placed and beaten, worth about 4s. (Rs. 2): Twenty to twenty-five special anvils or *kharvais*, thick iron bars bent and smoothed at one end, together worth £12 to £15 (Rs. 120-150): Four ordinary anvils or airans together worth £2 (Rs. 20): About fifty small hammers or *hathodas* with which the pot is beaten when it is placed on the bar anvil together worth about £10 (Rs. 100): Two pairs of scissors for cutting the copper or brass sheets each worth 4s. (Rs. 2): A wooden stand or stool called *khodve* for supporting the bar anvil. This is a block of wood with two logs about 60° apart, and, in the angle between the legs, a solid block of wood with a pole in the middle. Through the hole in the block the bar anvil is passed slanting till its one end rests on the ground and the top end remains standing out about a foot from the hole. The coppersmith aits on the low end of the bar anvil puts the pot at which he is working on the top end of the bar anvil, and, holding the pot in his left hand, beats it into shape with a hammer held in his right hand: Two files worth 2s. (Re. 1) each which last for only a year: Two pairs of compasses or *kaivars* together worth 4s. (Rs, 2): Two hollow stones or *ukhals* each worth 8s. (Rs. 4) on the top of which the sheet is laid and rounded by hammering: Bight chisels or chhanis for cutting the metal together worth about 3s. (Rs. $1\frac{1}{2}$).

Jingars or brass-casters have sixteen chief tools and appliances: An anvil or *airan* worth 10s, (Rs. 5): Four bar anvils or *kharvais* together worth 16s. (Rs. 8): Four hammers or *hathodas* together worth 8s. (Rs. 4): A pair of tongs or *sandsi* worth 1s. (8 as.): Two pairs of scissors

together worth 2s. (Re. 1): Five yearly-renewed files or kansis each worth 3d. to 9d- (2 - G as.): A vice or shagda worth 8s. (Rs. 4): A pair of bellows or bhatas worth 1s. (8 as.): A saw or karvat worth 1s. (8 as.): An iron bar or sandhan with oneend smoothed to serve as an anvil worth about 4s. (Rs. 2): A flat iron rasper or randha, six inches by half an inch with one end bent and sharpened used for scraping and polishing pots, worth 1s. (8 as.): A borer or samta worth 1½d. (1 an.): A twenty-four inch foot rule or gaj worth 3d (2 as.): A square iron tray or tas worth 6d. (4 as.): A palm loaf fan or hadpana used in fanning the fire worth $\frac{3}{4}d$. ($\frac{1}{2}$ - a.) : And two or three crucible catchers or chyaks. The chyak is an iron ring about three feet round with two long iron bars fastened at equal distances apart. Over the ends of these bars a second ring about twenty inches across is passed and moved up and down the bars' so as to increase or reduce the space above the base ring. In working the chyak the base ring is lowered into the furnace so as to surround the crucible, and the movable ring is forced down the bars till the crucible is tightly pressed between the bars and can be drawn out of the furnace.

Process.

In making brass, bellmetal or kase, and white metal or pancharasi, the alloy is smelted in a pit about three feet round and four or five feet deep. At the bottom of the pit a bellows' tube is firmly fixed, and over the bellows' tube are laid three or four flat-bottomed dome-topped crucibles or pots, about eighteen inches high and a foot round. The crucible, which is called *mus*, is made by the brass workers themselves of powdered broken China, flint, and ashes. After putting some borax or savage into the crucibles to serve as a flux, if brass is to be made, they are filled with broken pieces of copper and zinc and closed by an air-tight plug. Charcoal, dried cowdung-cakes, and wood are heaped over the crucibles. The fire is lighted, and, with the help of the bellows, is blown to a white heat. The men know the time, generally four to five hours, which the alloy takes to form. When the metal is ready each crucible is grasped in the *chyak* and lifted out of the furnace. On taking it out the side of the crucible is bored by the point of a nail, and the molten metal flows into shallow clay troughs where it is left to cool. When cool the solid mass is dragged from the trough by a pair of tongs or sandsi, laid on the stone or dagad, and beaten to the required thinness. To form metal sheets, whether local or imported, into the required shapes, the sheet is laid on the floor and the workman traces on it with a pair of compasses, the pieces required for the upper and the under parts of the vessel to be made and cuts out the two pieces with scissors or with a chisel. The metal is then softened in the fire and

hammered, and again softened and again hammered, the alternate hammering and heating being repeated three or four times till it is beaten into shape. The two pieces are then soldered with brass, borax or *savagi*, and chloride of ammonia called *navasagar*. The men work in bands of five or six dividing the labour. Some make the rough outline of the shape, others shape the neck, a third set form the lower piece, a fourth solder the shaped pieces, and a fifth polish the whole. All the polishing which the Tambats give is a rough scrubbing with a mixture of powdered charcoal and tamarind pulp, followed by beating with a small hammer till the whole surface is covered with hammer marks or facets.

Articles.

Poona copper and brass articles may be arranged under fourteen groups. Those used in the kitchen, those used in eating and drinking, those used in storing and carrying water, articles used in serving betel, musical instruments, measures, lamps, dishes and vessels used in worship, images, peasant jewelry, toilet requisites, appliances used in the dining hall but not for eating or drinking, miscellaneous ware and toys. Twenty pots are used in the kitchen. The patele (1) a cylindrical copper or brass pot, with slightly rounded bottom, varying in size from two inches round to four or five feet across and two or three feet high. The tapele (2) a somewhat conical pot, with round bottom and narrow neck. Tapeles vary from three inches to four feet across the bowl, the small ones being used for boiling rice and holding milk and the large ones for storing water. The bahugune (3) a cylindrical pot like the patele (1) only with a more bulging bowl and seldom more than a foot in diameter. The karanda or modak patra (4) a stew-dish for making modaks, shengas, and one or two other native dainties. Modaks and shengas are made of rice flour and contain cocoa-kernel, sugar, cardamums, almonds, and saffron. Their only difference is in shape. Modaks are shaped somewhat like a flat-bottomed lotus bud and shengas are semicircular. The karanda is made of three pieces; underneath a cylinder with flat side handles; in the middle a metal sieve with two hook handles; and at the top fitting the rim of the cylinder a dome with a cup-shaped handle. Water is boiled in the cylinder, the sieve is set in its place, the dainties are placed either on the sieve or on a piece of plantain leaf laid over it, and the lid is fastened down. Heat is applied to the lower part, and the steam gathering in the cover stews the dainties. The paradi (5) is another sieve or perforated dish used to carry off the surplus grease when karanjis or anarsas are fried in clarified butter. Karanjis like shengas are semicircular and made of flour, cocoa-kernel, sugar, cardamums,

almonds, and saffron. Karanjis differ from shengas in being made of Wheat flour instead of rice and in being fried instead of being stewed. Anarsas are made of rice flour, raw sugar, and poppy seed. They are round cakes about as big as the palm of the hand. The rovali (6) is a cylinder six to nine inches across and nine to twelve inches high, with a sieve at the bottom, used for washing rice before it is boiled. It is sometimes shaped like the tapele (2). The jhara (7) is a long handled sieve used for frying the gram flour paste required for bundhis. In making bundhis gram flour mixed with water is poured into this sieve which is held over a frying pan with boiling clarified butter and shaken. The gram flour paste falls into the pan in drops which become solid as soon as they touch the boiling clarified butter. The drops are then taken out in another sieve called upasni (8) which differs from the *jhara* (7) chiefly in not having a rim. The *chahadani* or *kitli* the English kettle is now in much use particularly among English-speaking natives. The kadhai (10) or frying pan is a hemispherical pan six inches to six feet across and one inch to two feet deep; it has two handles opposite each other and is used for frying. The parat (11) is a large dish two to five feet in diameter with a rim two to four inches high. It is used as a cover for a patele (1) or other large pot when anything is being cooked in it. It also serves for carrying cooked rice or vegetables from the kitchen to the dining hall. A small parat about a foot in diameter and made of brass, called *pitali* is used in the same way as the *parat*, and in addition among Kunbis and other middle-class Hindus serves as a dining dish. The pali (12) is a spoon with a rounded body and a long handle. It is used as a stirring rod or ladle while vegetables or pulse are being cooked and as a distributing spoon in the dining hall. The daba (13) is a cylindrical box with a top for storing dainties. The velni (14) is a saucer-shaped dish-like pot, usually one or two feet in diameter and sometimes polished in which enough rice for two or three guests is taken from the parat or tray, and poured into the plate. This dish also serves as a cover to a pot in which vegetables or pulse are boiled. The chamcha (15) or spoon made of brass is used for pouring liquid butter on rice. The katan (16) or phiraki, a tooth-edged circular plate fitted in a cleft handle is used for cutting the notched borders of karanjis. The kisni (17) or cocoa-kernel slicer is a sheet of brass about six inches by four on four two inch high feet. The surface of the sheet is broken by several rows of long narrow hollow ridges with raised sharp-edged openings against which the kernel is rubbed and cut into long slices: The *latane* (18), a slightly tapering brass rolling-pin a foot to eighteen inches long used for flattening polis, a variety of karanjis and anarsas: The chalar (19) is a brass siewe: The panchamrit patra (20) is a set of seven brass cups, six cups ranged round a central one with a handle; it is used for carrying koshimbirs

that is pickled fruit and vegetables from the kitchen to the dining hall. Fifteen eating and drinking pots are made: The already described parat tray (11) and the velni (14) come again in this group as they are used in serving rice and vegetables, and so does the ograle or mudale rice ladle (21); the *velni is* used for the second and later courses and the *ograle* for the first course only: The *tat* (22), a polished brass dining dish with bulging rim six inches to two feet across: The vati (23) a round-bottomed cylindrical brass oup one to four inches across is used to hold each man's share of curry and broth: The gadva (24) a polished narrow-necked copper or brass dinner pot, used to hold each man's supply of drinking water, varies from the size of a pear when it is called apkara to the size of a full grown pommelo; a spout-mouthed gadva is called ihari: The valyacha tambya (25) also made of copper or brass, is flatter than the *gadva* and like it is used as a water cup. The loti (26) is a pear-shaped pot like 25 and 26 in use size and material: The kadi (27) is a ring with a handle for the gadva, tambya and loti: The manakarnika (28) is a small brass drinking cup: The chambu (29) is a small water jar: The panchpatri (30) is a cylindrical water cup with a rim: The jamb or pyala (31) is a drinking cup set on a round stand: The rampatra (32) is a jamb (31) without a stand: The phulpatra (33) is a cylindrical cup like the panchpatri with a thicker and broader rim. The seven chief vessels for storing and carrying water are. The patele (1) and tapele (2) already described: The handa (34) a short-necked cylindrical pot used both for carrying and storing water: The ghagar longer-necked and with a more sharply sloping lower part than the handa; when small the ghagar is called kalasi: The ghangal or gangalaya (36), a copper jar ten to fourteen inches across, and four to nine deep, in used for holding hot bathing water and for steeping clothes: The *panchpatra* (37) is a large copper cylinder two to three feet across and three to four feet deep with a rounded rim and two handles: some panchpatras now have a stop-cork at the bottom and an iron stand: The *surai* (38) is a globular pot with a long narrow neck used by travellers for carrying water. The fifteen articles used in serving betel or pan supari are: The tabak (39) a round dish six inches to two feet across, with a rim half an inch to two inches high, the whole embossed with lotus flowers and other designs; it is used for keeping the fourteen smaller articles belonging to the set of betelnut dishes: The chauphula (40) is a box with six or eight compartments and three or four legs; each compartment has a separate top or lid shaped like the petal of a lotus or like a mango and sometimes ornamented with a peacock which serves as a handle; all the lids close inwards where a screw shaped like a lotus bud, when turned into the central hole, keeps the lids tightly fastened, the chauphula is used for holding the cardamums, cloves, nutmegs, mace, saffron, and

perfumed catechu pills which are eaten with betel: The dabi (41) is a cylindrical box for the slaked lime, catechu, and other spices which are eaten with betel: The adkita (42) is the nut-slitter for slicing the betelnut; it is of three or four different shapes: The panpud (43) is a square box for keeping the betel leaves: The tambakuchi dabi (44) or tobacco box, is a cylindrical box with a small hole at (he top and a lid moving round an axis, with a similar hole, through which, when the two holes are brought one over the other, tobacco is poured to be chewed with the betel and spices: The *chunal* (45) is a box for keeping the slaked lime which is eaten with betel: The pikdani (46) and the tast (47) are spittoons: The atar dani (48) is a small cup fixed in the centre of a little dish for holding the atar or perfumed oil which is served after betel: The *gulab-dani* (49) or rose-water bottle, is a bottle with a long narrow neck perforated at the end and fixed to the body with a screw, from which rose water is sprinkled over the quests after the perfumed oil has been served: The mor (50) is a peacock-shaped box: The daba (51) is a square box, and the panacha ganj (52) is a long cylindrical box with compartments used for holding the ingredients which are eaten with betel: The khal-batta (53) is a small brass mortar and piston for pounding betel for the aged or toothless. The twelve musical instruments are: The bell ghanta (54), either plain or decorated with figures, has a handle either plain or shaped like Maruti the monkey god, or garud Vishnu's winged charger: The *jhanj* (55) a flat and the tal (56) a rounded cymbal, both used as an accompaniment by reciters of psalms or drtis, by hymn-singing beggars, and by sermon-and-song or kirtan preachers: The chal (57) a row of little bells worn round the ankles by dancing girls: The ghungurs (58) are bigger bells worn round bullocks' necks and round the waist of some low class begging devotees of Kali: The *chiplyas* (59) are two fish-shaped flat bars three to seven inches long and one and half inches broad each furnished with a ring; the ring of the upper bar is passed over the thumb and the ring of the lower bar is passed over the second and third fingers and the performer clashes the bars together by the motion of the thumb and fingers: The kartal (60) is another pair of metal castanets which are sounded by shaking the band instead of by moving the fingers: The tasha (61) or kettle drum is a hollow hemispherical copper pot with a thick rim and a small central hole; which is covered with goat's skin and beaten with a pair of rattan canes along with the *dhol* or wooden drum: The *theka* (62) is a small flowerpot-shaped drum covered with goat's skin: The khulkhula (63) is a child's rattle: The karna (64) is the largo brass bass trumpet: And the shing (65) is the brass horn. The three measures are: The adholi (66) and the sher (67) copper cylinders used in measuring grain: The pavsher (68) is a small globular brass pot

used for measuring milk or a cylinder with a small hook-shaped handle for measuring oil The eight lamps are: The samai (69) and the kandil or lamandiva (70) both hat saucer-like brass plates with hollows in the lip for wicks; the samai is laid on a high brass stand and the kandil on a shorter stand and has a brass chain by which it is hang from the ceiling or from a door lintel: The diva lavne (71) is of two varieties, a smaller an inch or two inch broad flat-bottomed saucer with a wickhollow in the lip and a larger with a long flat hook-like handle: The niranjan (72) is a small cup set on a long or a short stand, for burning clarified butter before the gods: The pancharti (73) is a crescentshaped pot on a stand with five wick-openings which is sometimes fixed in the hand of a female figure: The divti (74) is a hollow conical brass handle in which a roll of oiled rags is fitted and burnt as a torch, being fed with oil from a spouted oil flask; it is much used by the devotees of Kali or Bhavani: The mashal (75) is a brass cylinder through which a roll of oiled rags is passed and burnt as a torch; the torch has to a great extent given way to the lantern, but is still used by the gentry in native states and it is burnt before Shankaracharya, the Smart Pontiff, when he travels during the day time as well as at night: The chimnicha diva (76) is the English lamp with a glass chimney. Twenty-six worship vessels and appliances are made: The abhishekapatra (77), a narrow-necked copper or brass pot is, somewhat like the gadva (24) except that its bottom tapers to a point, stands on a tripod with a ring at the top, and has a hole in the bottom through which water drips on the object of worship: The sampusht (78) a hollo cylinder two to six inches across and one to two high is used for washing images: The chauki (79) a low four-footed stool, round, square, or six or eight-cornered, is used as an image stand or as a support for an image stand: The adni (80) is a stand on which the conch or shankh is placed; it is generally tortoise-shaped, and is about half an inch in diameter: The ghanta (54) is the already described long handled bell: The ekarti or halkarti (81), is a two to four inches long fish-shaped pot for burning camphor before the gods: The pancharti (73) is the already described five-wicked lamp for burning clarified butter before the gods: The dhuparti (82), a stand with hemispherical top and bottom, is used for burning incense: The *niranjan* (72) is the already described lamp for burning clarified butter before the gods: The arghya (83) is a narrow cup half an inch to three inches long and a quarter of an inch to an inch broad, with a flat handle and long flat snout from which sacrificial water is poured. The panchpale (84) is a box with chambers for the various powders, turmeric gulal, abir, and kunku, with which during the worship the god and the worshipped are from tirm; to time marked: The kamal (85) is a round lotus-shaped plate,, sometimes fixed on the back of a metal bull, on which the gods

are placed. The tamhan, (86) is a shallow bath, except for its slightly bulging rim not unlike the tat or dining dish (22) in which image; are washed: The simvasan, literally lion throne, is a four-footed low stool with plates on two sides and a decorated arched back in front of which the gods are kept: The tabakdi (88) is a small plate an inch or two broad for holding the brow-marking sandalwood paste and red turmeric: The kachole (89), a plate with three oval divisions for keeping the white and red sandalwood pastes and the moistened rice with which the brows of the gods are marked: The sandhechipali (90) is a small ladle-shaped spoon for pouring out the sacrificial water: The vati (23) is the already described small cylindrical brass cup with rounded bottom from half an inch to an inch across in which sugar or naivedya is offered to the gods: The tulsi-vrindavan (91) is the ornamented square pot in which the holy tulsi Ocymum sanctum, the wife of Vishnu is grown: The devhara (92) or god shrine, is a dome with a stand on which the gods are arranged and worshipped: The pujecha-daba (93) or worship box, is a round box with a tapering lid having a hole in the centre in which the gods are placed at night and the lid fastened; while worship is going on the lid is used as a sieve from which water is allowed to drop over the gods: The gangajali (94) is a small gadva (24) or water pot with a lid ornamented with the bust of a woman to represent the Ganges, whose water is kept in it and is worshipped along with the house gods: The ghangali pela (95) is a handleless *ghangal* shaped (36) cup in which sugar or *naivedva* is offered to the gods at the close of the worship: The tabak (39) the divelavne (71) and the divti (74) are also used in worshipping the gods. Twenty leading brass images are made: Ganpati (96), tho god of knowledge and lord of the spirits, a fat four-handed man with the head of an elephant; Shankar or Shiv (97), the destroyer who has a trident in his hand and a necklace made of human skulls round his neck, with his wife Parvati and his son Ganpati on his lap. Maruti (98) the monkey god: Ram the deified king of Oudh supposed to be the sevonth incarnation of Vishnu, with his wife Sita, his two brothers Bharat and Shatrughna, and his general Maruti (58): Vithoba (100) with his wife Rakhmai, supposed in some places to be Baudhya or Budha the ninth incarnation of Vishnu: Balkrishna (101) or baby Krishna, the eighth incarnation of Vishnu crawling like a child with a ball of butter in one hand: Murlidhar (102) or tho fluting Krishna: Radha-Krishna (103) or Krishna and his beloved Radha: Bhavani Devi (104) or Kali, an eighthanded female figure slaying the buffalo giant Mahishasur: Dattatraya or Trimurti (105), is the Hindu Trinity with three heads and six hands guarded by four dogs which mean the Veds and a cow which means the earth: Khandoba (106) the guardian of the Deccan is shown on horseback: Parvati (107), a seated female figure the wife of Shiv the

destroyer is worshipped by thebride when the bridegroom is brought to the marriage bower and is given to the bridegroom who takes it home and puts it with his house gods: Gauri, the head of a woman is the goddess Bhavani which is worshipped during the Ganpati festival in August: Sheshashai, or Vishnu (109) the protector sleeping on the coils of tho thousand-headed snake with his wife Lakshmi shampooing his legs and Garud standing in front with folded hands. Other brass figures cast in Poona are: A row and a calf (109): A woman (110) holding ud-battis or incense sticks; A Gosavi or religious beggar (111) holding a fly-whisk or chauri; Riddhi and Sidhhi (112) Ganpati's female fly-whisk bearers: The Nandi (113) or Shiv's bull: A pair of rampant antelopes (114) each holding an ud-batti or incense stick: A pair of ganas (115) or attendants of Shiv, one blowing a conch shell and the other a horn, to be placed on each side of Shiv. Thirteen articles of peasant jewelry are made: The chandrakor (116), the ketak (117), and the phul (118) for the head; thusis (119), saris (120), vajratiks (121), and putlis (122) for the neck; velas (123), gots (124), and bangdyas (125) for the arms; patlyas (126) for the wrists; chhalles or salles (127) for the fingers; and todes (128), vales (128), and painjans (129) for the ankles. Five toilet articles are made: The karanda (130), a dome-shaped brass box for keeping red turmeric powder kunku or kunkum: The menacha karanda, slightly different from the *karanda* is used for. keeping beeswax which women rub on their brows before they put, on the red brow mark: The arsi (131) a burnished-brass mirror with a lid, is either round, square, oval, or heart-shaped: The kairi (132) a mango-shaped phial for keeping the datvan or tooth-powder [The ingredients of the tooth powder or datvan are: Harda and beheda myrobalans, galls Quercus infectoria, babhul bark Acacica arabiea, and copperas or green vitriol.] which strengthens though it blackens the teeth, and is used by lying-in women: The phani (133), a brass comb which has now almost entirely given way to ivory and sandal or blackwood combs: The chankyas (134), little round study or spangles applied to the brow below the red mark: The gandhachi dabi (135), a cylindrical brass box with a looking glass fixed to the lid in which high class Hindu men keep the saffron pill which makes the red brow mark or gandh. Three articles used in the dining hall for other purposes than eating and drinking are made: The rangole or kanale (136), a hollow cylindrical roll pierced with leaves, flowers, animals and other designs in dotted lines; it is filled with powdered calcspar or rangoli and passed over parts of the floor which have been marked with redpowder; before a dinner the seat of each quest is marked off with these lines, and on great days the rangoli is sprinkled on in front of the door step. The ud-battiche jhad (137), a tree-shaped brass stand on which incense sticks are burnt;

the *jhad* is generally placed near the plate of the bridegroom or other distinguished guest: The *phulyas* (138), circular pieces of brass, shaped like a flower with a hole in the centre which are nailed along the edges of the low Hindu dining stools.

Fifteen miscellaneous brass and copper articles are made: The charvi (139), kasandi (140), and gundi (141) globular milk pots: The tavi (142) an oval brass milk pot: The bondle (143) a spoon with a flat handle and a long snout used in giving milk to children: The vajri (144) is a metal plate with roughened surface and a handle used as a foot scraper: The daut (145) an ink bottle either round, square, sixsided, or eight-sided: The square or six-sided box (146) containing two ink bottles, one for red and the other for black ink a sand box, and a square gum bottle is also called daut: Abdagiracha kalas (147) a bud-shaped ornament fixed at the top of the abdagir or state wedding umbrella: The kulup (148) or padlock, the bijagre (149) or hinge, the taraju (150) or scales, the gaj a bar (151) or window rail, the bolat (152) the English bolt, and the kadi (153) a ring-shaped handle. Except the vessels and appliances used in worship the images of the gods and the miscellaneous ware all of these brass articles are made small as toys for children. In addition to these pots eight special toys are made: The khurchi (154) a small chair; the palang (155) a sofa; the palna (156) a cradle; the English couch (158) which has been adopted into Marathi under that name though pronounced more like coach than couch; the mangala a single fire-place (159) and the chul a double fire-place; the table (160); and the bank or bench (161).

The Jingars mostly do the finer kinds of brass work, making false jewelry, gilding clocks, turning metal, casting and polishing gods, making locks, and sharpening swords and knives. The Kunbis, who have lately taken to brass work, are of two classes Ghadnars or beaters and Otnars or casters. Of the beaters about five hundred are employed in twenty-five establishments and of the casters about four hundred are employed in twenty establish-ments. The first outsiders or non-hereditary workers who started a brass beating establishment in Poona were Khandu a Satara Mali and Abdulla Billa an Ahmadnagar Musalman. The present workers are all Poona Kunbis. They speak incorrect Marathi, live in one-storeyed hired quarters, eat coarse food chiefly vegetable food, dress in a cap or coarse Maratha turban, a kerchief bound round the loins, a jacket and sometimes a scarf round the shoulder. They are labourers being paid by the outturn and earning $4\frac{1}{2}d$. to $7\frac{1}{2}d$. (3-5as.) a day. They seldom suffer from want of work. They work from sunrise to sunset with only rest enough at noon to take a meal. They stop work on the last or no-moon day of each

lunar month, on the day after *Sankrant* in January, for five days at *Shimga* in March-April, and on the day after an eclipse. They keep these days as days of rest from religious motives not from a love of idleness.

The materials which these Kunbi coppersmiths work up into rough pots are odd pieces of braziers left over by the Tambats in cutting out vessels; the remains of copper sheets punched at the mint or the cartridge factory; and broken pots. These materials on an average cost $5\frac{1}{2}d$. to $7\frac{1}{2}d$. a pound (Rs. $7\frac{1}{2}-10$ the man of 32 lbs.). The material is supplied by the owner of the establish-ment who is either a Kasar or a Varna, and sometimes a Kunbi, and more often by a dealer. The Kunbi coppersmith's tools and appliances differ slightly from those used by the Tambats although they sometimes go by the same names. Instead of a flint and Chinaware crucible the Kunbi brass-smith uses iron cups nine inches across and three to four inches deep. An establishment of ten workmen use 100 to 125 iron cups in the year as the cups burn off and break by constant heating. It is said that about every hundred pounds of brass smelted wear out an iron cup (4 cups in 250 shers). Two or three large tongs or sandasis about three feet long and eight to ten pounds in weight each worth 3s. to 4s. (Rs. $1\frac{1}{2}$ - 2). Four to six bellows a year each worth 3s. to 5s. (Rs. 1 ½ -2½). Circular wooden moulds or sachas with a handle each worth 3d. to $4\frac{1}{2}d$. (2-3 as.). Four to six iron bars, three to five feet long and an inch round, called salagas, together worth 2s. to 4s. (Rs. 1-2). A large strong anvil fixed in an equally strong babhul block worth £1 to £3 10s. (Rs.10-35). Six strong hammers with wooden handles each worth 2s, to 3s, Four pairs of strong scissors each worth 2s. to 3s. (Rs. 1-11/2). Four or five fourinch square anvils each worth 4s, to 6s. (Rs.2-3). A second set of twenty to twenty-five hammers or hathodas to match the second anvil each worth 6d. to 1s. (4-8 as.). Half a dozen bent bar anvils or kharvais five to six feet long, two inches square at one end, and four inches square at the other. Unlike the Tambats the Kunbis have no khodva or triangular wooden stand for their bar anvil, a small block is placed below the bar anvil and the workmen sits on the bar with his leas on either side of it. Four to five hammers to match the bar anvil or kharvai each worth 1s. to 1s. 3d. (8-10 as.). Four to six small anvils two inches by three to four feet long called paharai each worth 2s. to 3s. (Rs. 1 -11/2) which are fixed in small babhul blocks buried in the ground, eight to twelve small hammers to match the paharai anvil together worth 6s. to 12s. (Rs.3-6). A pair of casks four feet high and three feet in diameter for holding tamaring pulp mixed with water each worth 4s. to 6s. (Rs.2-3). A hollow stone or ukhal worth 2s. (Re. 1). The small pieces of braziers are gathered together and shaped into

cylindrical lumps. A few pieces of copper and zinc are also put in the iron cup or tray and a small quantity of borax is added. The iron cup is set in the furnace which is a pit three feet round and two feet deep with the sides raised two feet above the floor. Dried cowdung cakes charcoal and wood are heaped above and around the cup. Two bellows are placed one on each side of the opening in the banked sides and worked till the alloy is melted and the parts thoroughly amalgamated. The cup is then lifted up with the large tongs and the liquid contents poured into a circular hollow struck with a wooden mould on a bed of clay. When solidified the rounded cakes of brass are taken to the large anvil or banda when one man holds the cake firmly with pincers while five or six labourers hammer it in orderly succession. When it is beaten to a given thinness the cake is put aside and another cake hammered in the same way. The cakes are afterwards taken in heaps of ten or fifteen and again hammered. When thin enough they are cut by scissors into circular pieces of the required size and taken to the second anvil and the hollow stone or ukhal to be shaped, and are passed from hand to hand and from anvil to anvil till they are completed. Each pot is shaped in two separate pieces an upper and a lower. When the two parts are ready they are dovetailed and beaten together at the joining. They are then again taken to the furnace and a composition of brass dust and borax is thrown over the joint, the pot is heated, and the joint is once more hammered. The next process is polishing. To polish them, a number of pots are steeped two to four days in a solution of tamarind pulp, rubbed with powdered charcoal and bricks, and hammered again till the whole surface is covered with hammer marks.

Changes in Trade.

Poona brass making originally came from Ahmadnagar, all of whose coppersmiths have now moved to Poona. Pen and Revdanda in Kolaba, which used to make considerable quantities of brassware, are almost entirely without work; Chandor is declining, and though the practice of pilgrims bringing away Nasik brassware will probably serve to keep up the demand at least for the higher class of articles made at Nasik, unless they change their system, the whole of the Nasik trade in ordinary cooking and drinking vessels will pass to Poona. The Poona coppersmiths are able to undersell their rivals by adopting the union of combination among the workers and separation among the articles made which is the secret of cheap production. The cooking and water vessels made are all of one size and of one shape. And in making it each vessel is passed through a succession of groups of workmen

whose whole attention is given to performing one stage of the work quickly and thoroughly.

SILK WEAVING.

Workmen.

Silk weaving in Poona city is at present (1883) flourishing, and to a great extent has eclipsed the silk weaving of Yeola in Nasik. Of 700 to 800 looms, nearly two-thirds are owned by Momin and Julaha Musalmans who have settled at Mominpura in the Juna-Ganj ward. The Hindu silk workers are found in Kachiali and near Someshvar. The Musalman silk workers; belong to two sections, Momins proper and Julahas, and the Hindu workers to three sections, Khatris, Koshtis and Salis. According to their own account most of the Musalmans came about three generations ago from Haidarabad, Dharwar, Narayan Peth, and Gulmatkal in the Nizam's country, and the Hindu workers, according to their own account, came from Paithan and Yeola three or four generations ago. As a class both Musalmans and Hindus are mild, hardworking, and sober, the Hindus being harderworking and thriftier than the Musalmans. The home speech of the Musalmans is Hindustani and of the Hindus Marathi. Many live in their own houses and the rest in hired quarters. The Hindus, though they eat mutton and fish on holidays, generally live on vegetable food; the Musalmans use animal food almost daily. Both Hindus and Musalmans wear a three-cornered turban, but the Musalman turban differs slightly in shape from the Maratha turban. Both classes wear long white coats reaching the knees. Round their loins the Hindus wear the dhoti or waistcloth, and the Musalmans wear trousers. The demand for Poona silk is growing and the workers are well-to-do. Their busiest season is the Hindu marriage time between November and May. The Musalman workers rest from the 5th to the 15th of Muharram, on the Ramzan and Bakarids, and on Saban and Waftan. Hindu silk workers rest on the monthly no-moon day, on the day after the winter Sankrant which is called Kar in January, for two or three days during the Shimga holidays in March-April, during two days at *Divali* in October-November, and on the day after all eclipses. Poona silk weavers work from seven to ten in the morning and from one to sunset. Their women and their children over ten help the men in sorting, reeling, and sizing. Since the 1876-77 famine, about twenty Kamathi Koshti families have come from Narayan-Peth in the Nizam's country and settled at Poona. They own about 100 silk looms and are harderworking and move successful than either the Musalman Khatris or the local Koshtis. The only silk used is China silk. It is of four varieties duem or second quality, sim or third

quality, *lankin* a variety of the second quality, and *sheval* or *sial*. All of it comes to Poona from Bombay as personal luggage. The *duem* is bought at 16s. 6d. a pound (Rs. 16½ a *sher*), the *sim at* 16s. a pound (Rs. 16 a *sher*), the *lankin* at 15s. 6d. a pound (Rs. 15½ a *sher*), and the *sheval* or *sial* at 13s. 6d. to 14s. a pound (Rs. 13½ to Rs. 14 a *sher*). The Poona silk weavers either borrow money from Shimpi and Marwar Vani silk dealers and buy silk yarn and. gold thread, or they work as labourers receiving the materials from Shimpi and Marwar Vani dealers and being paid by the piece. When money is advanced the silk dealers do not charge interest but get 1½ per cent on the sale proceeds of the fabrics.

Tools.

Five tools and appliances are used in a Poona silk worker's or rahatkari's, literally wheelman's, factory. These are three large, cages called *phalkas* and one small cage called *phalki*, each worth: 3d. to 6d. (2-4 as.); and fifteen or sixteen reels or asaris each worth 3d. to 6d. (2-4 as.); To make a reel or asari, a piece of stick is passed through a hollow reed and fixed in the cleft end of a piece of bamboo.] a small wheel for winding the silk from the reels to the bobbins worth 6s. (Rs. 3); about 500 bobbins or garolis together worth about 7½d. (5 as.); and the large throwing [The throwing machine or rahat is in three parts. In the centre is the bobbin frame or tat with a central and two side uprights, on one side of the tat is the large wheel or rahat, six to eight feet in diameter, which gives its name the machine, and in front of the tat, supported by two uprights, is the frame or dhol about two feet in diameter and six to eight feet in length.] machine or rahat worth about £3 6s. (Rs. 33) including £2 10s.(Rs.25) for the big driving wheels, 8s. (Rs. 4) for the upright wooden frame or tat on whose pegs the bobbins turn, and 8s. (Rs. 4) for the drum or dhol round which the twisted thread from each bobbin is rolled. To start a silk reeling and throwing establishment requires £3 to £4 (Rs. 30 -40).

Process.

On getting to Poona, the raw silk is made over to the reeler or rahatkari under whose care it is reeled, sorted, and twisted. It next goes to the dyer or rangari to be coloured, and when received from him is sent to the weaver or magvala by whom it is warped, sized, and woven. At the reeler's or rahatkari's the first thing done is sorting the silk. To sort it the silk is thrown round a three feet bamboo cage or phalka, with a central handle about two feet long. In front of this cage

the sorter, who is generally a woman, sits, and, fastening the end of the hank to a reel or asari, fixes the central rod of the cage against her left foot, and sets it spinning rapidly by twisting the end of the rod between two of her toes. The quality of the fibres in the skein is uneven, varying through five or six gradations. It is the sorter's chief duty to watch these gradations and to wind all of each variety round a separate reel. With this object, before she begins to wind, she gathers near her five or six reels or asaris. On finding the end of the skein she knots it to one of the reels, and placing the cage against her left foot, spins it round between two of her toes. The fibre passes through her fingers, and as soon as its quality changes, she breaks the silk, picks up a second reel, knots the end to it, and winds till the quality of the silk again changes, when either a third reel or the first reel is taken up. If the new quality is the same as that on the first reel the sorter puts the ends of the silk into her mouth and knots them with her tongue with great neatness and speed. In this way even a young worker, without hitch or mistake, will sort a hank over five or six reels.

The sorted silk is ready for twisting. To twist it, with the help of a small wheel, the silk is wound from the reels on hollow reed bobbins or garolis. These bobbins are then arranged on the throwing machine or tat, and, by means of a wheel and axle, the fibres of each bobbin are twisted together and guided through a glass or metal ring round the drum or dhol, and then reeled on the smaller cage or phalki. This twothread or dontar yarn is used in making some fabrics, but most of the yarn is again wound on a reel and from the reel to the bobbins, and a second time put thiough the throwing machine so as to make the regular or chartar that is four-thread yarn. The rahatkari or wheel man, who takes his name from the large wheel that drives the throwing machine, has now completed his work. Silk yarn is called sheria. In sorting and twisting it the raw silk loses about eleven and a quarter per cent in weight. To make good this loss a corresponding deduction is made in the standard weight, that is, the sher for weighing silk when handed over to the worker is reduced in weight by eleven and a quarter per cent, and is still called a sher for weighing the sheria or twisted silk. The rahatkari receives 15d. to 16d. (10-10? as.) for each pound of silk that passes through his hands. His monthly income is said to range from 8s. to 10s. (Rs. 4-5). When the rahatkari employs labourers he pays them 8s. to 10s. (Rs. 4-5) a month.

After the silk is twisted it is bleached and dyed. In bleaching it the raw silk is steeped in a boiling solution of country soap, or in an alkaline ley called *ukhar* prepared by boiling together slaked lime and *papadkhar* or impure carbonate of soda. While steeping in the boiling

liquid the silk has to be carefully watched as it spoils if kept in it too long. All the Poona silk dyers are Hindus, whose forefathers are said to have come from Paithan about four generations ago. To compete with foreign silks they have given up their old processes and taken to the use of aniline dyes. The ease and speed with which aniline dyes can be used more than make up for their fleetingness. These cheap dyes, together with the inferior silk used, give the silks of Poona a great advantage in competition with the high class fabrics made in Yeola. A silk dyer is said to make 12s. to 14s. (Rs. 6-7) a month On leaving the dyer, silk goes to the weaver or magvala who performs three processes, sizing warping and weaving. For a silk weaver's establishment twelve appliances are wanted. They are to prepare the warp the tansala or uprights with rings worth 16s. to 18s. (Rs. 8-9); 200 reed bobbins or tikhadis for winding the weft together worth about 1s. (8 as.); a small wheel or rahat worth 6s to 8s. (Rs. 3-4); a large cage or phalka worth 6d. (4 as.), and five small reels or asaris each worth 15d. (10 as.); For the loom a cloth beam or tural worth 3s. (Rs. 1½); the reed frame or shuttle-beam called hatya, used as a batten or lay, worth 7s. to 8s. (Rs. 3½.-4); the treddles and heddles worth 10s. to 12s. (Rs. 5-6); sandhs or kaichis, rods laid flat between the threads of the warp to keep them from entangling, worth 1s. to 18d. (8-12 as.); the warp beam or ata worth 2s. to 3s. (Rs. $1-1\frac{1}{2}$); three shuttles worth 1s. to 18d. (8-12 as.); and a piece of polished agate or mogri, used to rub the gold borders, worth 6s. to £2 (Rs. 3-20).

Silk is sized indoors, the warp silk in a different way from the weft silk. The warp silk is sized on the tansala, a pair of upright wooden bars about eight feet high, with, a row of glass or metal rings fixed to each bar through which the yarn is passed, drawn tight, and stiffened by brushing into it a dressing of size. In sizing the weft, the silk is placed on a cage wound on reels, and while on the reel it is moistened with size. The sizer, who in the case of the weft yarn is always a woman, sits with the reel on her left side, and, on her right, a small wheel, to whose axle is firmly fitted a piece of reed bobbin called tikhadi. She picks the end of the hank from the reel, fixes it to the bobbin, and by working the wheel with her right hand makes the bobbin spin quickly round winding the silk round itself. As the wheel turns, the worker damps the yarn on the reel with size, and passes the thread through her left fingers so that the size is evenly spread over the whole line. The warp is next made ready. Warping includes three processes, heddle-filling, joining, and arranging. The heddle-filler, according to the pattern of the borders, passes threads through the loops in the cords of the different heddles and between the teeth of the reed or phani. When this has been done, the joiner or sandhnar, connects the

ends of the warp threads with the heddles, by tying the corresponding threads of the warp to those passed through the heddles and reed by the heddle-filler. The threads are finally arranged, through the whole length of the warp, in accordance with the position the joiner has given them. The silk loom is three to four and a half feet broad and eight to fifteen feet long. At one end sits the weaver with his feet in a large pit, and immediately in front of him is the square cloth beam or turai which supports the warp and round which as it is woven, the fibre is rolled. In the weaver's pit are two or four treddles or foot boards,' by working which the weaver raises and lowers the warp threads. The two or four treddles are joined by strings with the heddles, two or four frames which hang from the roof across the threads of the warp each with a set of threads, the set of threads of the one heddle holding in their loops the lower, and the set of threads in the other heddle holding in their loops the upper threads of the warp., As the treddles are worked the heddles move the threads of the warp in turn up and down, while, between each movement, the shuttle loaded with the weft yarn is passed across the warp. In front of the heddles and like them hung from the roof, is the reed or *phani*, between whose thin slips of bamboo the warp threads have been passed. The reed is set in a heavy frame, the shuttle beam, which the weaver works to force home the threads of the weft after the shuttle has passed. Behind the heddles horizontal rods are thrust between the upper and lower threads of the warp to keep them from entangling, and ten or twelve feet further, is the warping beam or ata, on which the warp is wound. This beam, about four feet long and two inches round, is fastened in the middle to a rope, which is kept tight by being passed round a post or pulley and fastened close to the weaver's side to a peg or to one of the uprights which support the cloth-beam. The weaver from time to time loosens the rope as the cloth is wound round the cloth beam. To weave silk with gold borders, besides the usual large heddles, two sets of smaller heddles are used. The first or large set of heddles governs the motion of the whole of the warp. The second set of four heddles controls the gold thread in the border, and the third, which consists of two heddles, controls certain gold threads which form a tooth or sawshaped edging to the inner side of the border. The border-edging or third set of heddles are not connected with any treddles. They are simply worked by the weaver's hand and kept in their place by small sand bags hung as a balance. After two movements of the first or main heddles, the second or border heddles are put in motion by the weaver pressing the left treddle. The set of the three rods that support the edging heddles, is lifted by the weaver's hand, and, at every movement of the first or main heddles, one of the rods which support the edging heddles is lowered. When all the are lowered, they are

again raised by the hand and again pressed down one after the other. In the Kamathi's loom even the heddles of the second set which control the gold border threads Lave no treddles. These heddles are supported by small bags the work-men lifting all of them, and pressing them one after the other, in the way the Sali or Momin weaver moves his third or tooth edging set. of heddles. When any silk design is to be worked into the body of the fabric the Kamathi weaver takes a greater number of the large heddles and interposes them between the first or main set and the second or border set. The number of these extra heddles depends on the design. Like the second or border set of heddles they are supported by sand bags and moved up and down by the weaver's hand. The loom for weaving brocade, that is a silk fabric with gold flowers or other ornament woven into the body of the web, is very elaborate, the arrangement of heddles being very intricate and the work of weaving very tedious. The brocade loom, in addition to the three sets of heddles used in weaving a bordered silk fabric, namely the main heddles, the border heddles, and the heddles for the border edging, has a fourth set of heddles, for the ornament that is woven in the body of the web. The first or main set of heddles consisting of two heddles and two treddles comes close on the other side of the reed or phani. Then comes the second set of four heddles for the border. These border heddles are supported and balanced by bags of sand and for the heddle frames iron rods are used instead of the wooden rods used in the Sali's loom. This set of heddles controls the gold thread in the border and is worked by the weaver's hand. Then follows the third or border-edging-heddles which are also fastened to iron rods supported by sand bags and are worked by the weaver s hand. Behind, that is further from the weaver than the edging heddles, are the brocade heddles. These are a fringe of loops of white thread which are passed round fibres in the web and rise about six inches above it. The tops of the loops are fastened to a belt of white cords, which, according to the pattern, vary from twenty to forty. These cords are closely strung at each end to a wooden bar about a foot and a half long which are fastened in a position level with the web to two upright poles at the sides. From the middle of this belt of cords, or the heddle back, rises above the centre of the web a bunch of white strings one for each heddle which are held upright by being fastened to a piece of cane which hangs from a cross bar. On the weaver's right of the bunch of upright strings a cord slants from the upright threads or *nakshas* to a cord that passes from side to side, a few inches above the belt of cords or heddle back. On this slanting string are strung a number of loose knotted loops or pagias which are fastened to the upright threads. These loops are most difficult to arrange only one or two of the cleverest workers being able to prepare them. When a brocaded

figure begins to be woven the weaver draws certain of the loose loops or pagias down the slanting string, and, by drawing the loops down, draws up some of the upright threads or nakshas, which in turn raise the cords of the cord belt to which they are fastened, and again the movement of the cords raises the loops which hang from the cords and with the loops raises certain of the fibres of the web. To keep the belt cords raised the weaver inserts between them and the remaining cords of the belt two wooden wedge-shaped hooks which hang from the roof each about eighteen inches to the side of the central threads or nakshas. After the required set of fibres has been raised from the rest of the web, with the help of one or two boys, the weaver arranges across the breadth of the web a number of bobbins full of gold thread. The number of bobbins depends on the number of flowers in the breadth of the web. Then the weaver and the boys, at each of the brocade flowers, pass the bobbin of gold threads under the threads of the warps which have been raised above the rest. The wooden hooks are then drawn out and the brocade treddles are allowed to fall to the general level. The main and border heddles are then worked and one fibre of weft is added to the fabric. Then again certain of the brocade pattern loops are drawn down and certain cords in the brocade treddle drawn up and kept up by the wedge-shaped hook. Then under each of the raised fibres in the brocade pattern gold thread is passed, and then again the main and border heddles are worked and a second fibre added to the weft. Brocade weaving is very slow, a man and two boys in a day of nine hours weave only about nine inches of fabric or about one-third of the amount of plain silk which one man can weave. While the brocade heddles are being worked, the first or main heddles are slackened by unfastening them from an iron hook with which they are connected while in motion. When labourers are employed as weavers they are paid 1s. to 2s. 6d. (Rs. $\frac{1}{2}$ -1 $\frac{1}{4}$) a yard of the fabric woven, which work he performs in a day. The owners of the looms state that their monthly earning average £1 10s. to £2 10s. (Rs. 15 - 25). Pitambars and paithanis that is men's and women's robes are the only articles woven. Khans or bodice pieces are cut out of the robes. Unlike the Yeola women's silks the Poona silks are sometimes brocaded as well as gold bordered. When ready for sale the silks are taken to the local dealers and sold by the weavers on their own account, or, in rare cases when they are made for a dealer, are taken and paid for by him. The dealers sell them locally or send them to Bombay, Pandharpur, Satara, Sholapur, and other trade centres. The demand, especially for the lighter and cheaper varieties, is steadily on the increase. The value of the yearly outturn of silks in Poona is said to average about £25,000 (Rs. 2,50,000).

GOLD AND SILVER THREAD.

Gold and silver thread making is a prosperous industry in Poona city. It is a long established craft, when or by whom started is not known. The forefathers of the present workers are said to have come from the Nizam's country and the fact that their family deity is Bhavani of Tuljapur in the Nizam's country to some extent supports this belief. Most of them are settled in the Shukravar and Aditvar wards of Poona city. Gold and silver thread making supports about 250 families or 800 people. Lad-Sonars, Kokni-Sonars, Khandesh-Sonars, Adher-Sonars and Vaishya-Sonars, Lads proper, Marathas, and Pardeshis. About twenty-five families are Pavtekaris or bar-makers, seventy-eight are Tarkasas or thread-drawers, and seventy to eighty families are Chapadyas or wire-beaters. There are also about 200 Valnars or thread-twisters mostly women. All the Pavtekaris or barmakers are Sonars. Of the thread makers or Tarkasas, the thread-beaters or Chapadyas and the thread-twisters or Valnars most are Lads. The name Lad seems to point to a South Gujarat origin. But according to their own accounts they came to Poona from Aurangabad, Paithan, and Karanje in the Nizam's country. The Lads say their forefathers worshipped Parasnath and Balaji and afterwards, they do not know how long ago, they forsook the Jain faith for the worship of the goddess of Tuljapur. The rest are Kunbis and other classes, including a few Deshasth Brahmans, who took to thread making because it was flourishing. They are a contented and hardworking class. The Pardeshis speak Hindustani at home and the rest Marathi. They live generally in one-storeyed houses, some their own, others hired. The Lads, Pardeshis, and Brahmans live solely on vegetables, the rest may eat flesh. All except the Brahmans are allowed to drink liquor but all are moderate in its use. The different divisions of workers dress like other men, of their own caste, the Brahmans in the broad flat-rimmed Brahman turban; the Marathas in a three-cornered turban; and the Pardeshis in a cap. The shape of coat also differ slightly. As a class they are well-to-do. Their busy time is the Hindu marriage season between November and May. Their rest days are the monthly no-moon days or amavasyas, the day after the mid-winter Sankrant or tropic in January, five days at *Shimga* or *Holi* in March-April, two days at *Divali* in October-November, and the day after every eclipse. The day after Nagpanchmi in August which is called Shiralshet's Day, is kept as a holiday and called Kar, Except in twisting, gold and silver thread makers get no help from their women nor from their children till they are over twelve. Most or the gold and silver used in making the thread is brought to Poona by Marwar Vani and Shimpi dealers who buy it in Bombay either from European firms or from Marwar Vains near-Khara

Kuva in Mumbadevi ward. The metal must be perfectly pure Shambharnambri that is 100 per cent. Even the best metal, according to the thread makers, in the beating and purifying through which it has to pass, before it is lit for their work, loses a twelfth. When ready for use the gold is worth £2 As. to £2 6s. (Rs. 22-23) a tola. Besides imported gold, during the last thirty-five years, a certain quantity has been produced locally by extracting with nitric acid the gold from left off gold-embroidered cloth. This has been practiced successfully with silver as well as with gold tissue. The metal obtained from embroidery is called *gotachi* or ball-shaped. The man who started the idea was a Gujarat Vani whose family made a. fortune and gave up the industry. At present (1883) three rich Bohoras follow this craft. Four kinds of silver are used patachi, or bar silver which comes from Europe and patachi which comes from China, gavthi or local, and gotachi or ballshaped made in Poona from silver embroidery. Local or *gavthi* silver is already mixed with a small proportion of alloy and is used without any change. Pure English silver has to be mixed either with ten to fifteenfortieths of ball silver or local silver or with three-fortieths of copper. The silver is brought in ingots or balls and handed to the bar-maker or pavtekari who is also the gilder. A bar-maker uses twenty tools: Crucibles or *mushis* of which each establishment has about ten, together worth about 8s. (Rs, 4); a clay fire-trough or shegdi costing $1\frac{1}{2}d$. to 3d (1-2 as.), an iron sieve or *jhara* two to three inches in diameter with an iron handle costing $1\frac{1}{2}d$. (1 a.); three anvils or airans, one worth £2 14s. (Rs. 27), a second worth £2 8s. (Rs. 24), and a third worth 14s. (Rs. 7); three hammers or hatodas together worth about 4s. (Rs. 2); one iron bar or otani hollowed on one side to serve as a mould worth about 8s. (Rs. 4); tongs or chimtas worth 6d. (4as.); a stone water trough or *hundi* for cooling the heated bar worth 6d. (4 as.); a pair of bellows or bhata worth 4s. (Rs. 2); a pair of files or kanas worth 1 s. (8 as.); a winch or lod always of babhul wood worth 14s. (7 as.); about fifteen draw plates or jantars each said to be worth 10s. to £5 (Rs. 5-50); three nippers or vakas costing 4s. (Rs. 2), 2s. (Re. 1), and 1s. (8 as.); a chain or sakhali worth 2s. 6d. (Rs. 1¼); two scales with weights kata and vajan worth £1 to £1 10s. (Rs. 10-15); two nails or bharus for cleaning draw-plate holes worth 3d. (2) as.); a pair of iron pincers or karlis worth 6d. (4 as.); two small cages or *phalkis* for winding the wire together worth 1s. (8 as.); and a pair of smaller reels or asaris each worth 6d. (4 as.) Under the bar maker's hands the metal passes through two main processes. The gold is purified by boiling it with lime juice in a pipkin and is then heated several times and beaten into gold foil. The silver is melted in a crucible, poured into a mould, and hammered into a short rough bar fifteen to eighteen inches long and one and a half round. It is then

worked into a more perfect shape and the surface roughened with a file. Next gold foil is carefully wound round the silver bar so as to completely cover it. The bar is wetted and rolled by the workman up and down his thigh till the gold foil clings to the silver. Then a, thick Soft coir is wound tightly round the bar and it is laid, with the edges of the gold foil underneath, in the clay trough filled with lighted charcoal which is fanned into a white heat. It is next drawn out and hammered on a highly polished four inch steel anvil. Under this heating and hammering which is repeated three times, the bar gradually lengthens but without disturbing the surface of the gold or exposing the silver which never again shows into however fine thread the metal may be drawn. The gilding is completed when the ingot has been beaten eighteen inches long. After the gilding the bar-maker or pavtekari turns the bar into wire by dragging it time after time through gradually smaller holes in the drawplate. For this the bar is again heated and pointed. The point is pushed through the largest hole in the drawplate which is set against two wooden uprights fixed in the ground. When it shows through the drawplate the point is caught in a pair of strong pincers whose handles are joined by a chain and ring to one of the spokes of a winch. This winch has a drum, a foot in diameter and three feet long, fixed inside sockets. At right angles to the drum it has three arms, each two and a half feet long, which work in a hole, about six feet by three, and three deep. When the end of the bar is firmly grasped by the pincers, a workman, laying all his weight on one of the arms of the winch, draws it down and drags the point of the bar through the hole in the drawplate. As it passes through the drawplates both the bar and the hole of the plate are smeared with a composition of beeswax and other substances. When the bar has been drawn through the plate, the point is again hammered, and, in the same way, is dragged through a smaller hole. This dragging is repeated about twenty times. The bar, which has now become a wire about six yards long for each tola of metal, is cut into lengths of fifty yards and made over to the thread-maker or tarkas. The pavtekaris or bar-makers for their bar-making and wire-drawing are paid 4s. (Rs. 2) for every passa or one pound (40 tolas) silver bar. Of the 4s. (Rs. 2) 1s. (8 as.) is paid to two labourers at 6d. (4 as.) a passa or one pound silver bar, 6d. (4 as.) goes in coal, and 2s. 6d. (Rs. 11/4) are left as the bar maker's earnings for two days. Allowing for breaks in the work and for holidays the bar maker's average monthly income varies from £1 4s. to £1 14s. (Rs.12-17).

From the bar maker the wire goes to the thread maker the *tanaya* or *tarkas* who uses fourteen tools. These are: The *palda*, a wooden drnm-shapedreel worth 4s. (Rs.2); the *paldi* a smaller drum also made of

wood worth 1s. (8 as.); the khodsa a stool on which the drums are fixed worth 2s. 6d. (Re. 1¼); a dozen drawplates or jantars varying in value from 1s. to 10s. (Rs. $\frac{1}{2}$ -5); the *thesni* a small sharp pointed hammer used for stopping old drawplate holes worth 6d. (4 as.); a small anvil or airan worth 3d. (2 as.); a pair of pincers or sanasi worth 4½d. (3 as.); a file or kanas worth 9d. (6 as.); a small hammer or hatoda worth 6d. (4 as.); a nail or chaurasi for enlarging the drawplate holes worth 6d. (4 as.); a sharpening stone or kalipathri worth 3d. (2 as.); a crank or makoda to turn the drams worth 11/2d. (1 a.); a reel axis or bhongli worth $1\frac{1}{2}d$. (1 a.); and a small bobbing or chakkar. To draw the wire into a thread the palda that is the larger reel or drum seven or eight inches in diameter, and the smaller three inch reel or paldi are supported horizontally on two upright pivots about twenty inches apart. Between the big drurm and the little drum a small drawplate is fixed to two upright iron rods. This small drawplate is a piece of an old sword blade pierced with holes of different sizes. The wire is wound round the small reel or paldi and its point is sharpened by two bits of China, till it is line enough to pass through the largest of the drawplate. holes. When it shows on the other side of the plate, the point of the wire is caught in small pincers and pulled through. The end of the wire is then fixed on the larger reel or palda which is turned by a metal handle, and drags the wire through the hole then the whole is wound off the small reel. The wire is then wound back on the small reel, and drawn through the next largest hole. This drawing and winding is repeated till the wire has been drawn to the required fineness. To draw a tola of metal 250 yards, the wire has to pass through at least sixty holes. Elaborate as this is so great is the workman's skill and delicacy, that he is said to be able to make 900 yards of thread from one tola of metal. A thread maker tanaya or tarkcas is paid £2 10s. (Rs. 25) for every 100 tolas of metal he draws. His average monthly income ranges from £2 to £2 10s. (Rs. 20-25). Some of the thread makers employ lads as apprentices, who at first work for nothing and are then paid 2s. to 12s. (Rs. 1 -6) a month, according to their work. The thread is now handed to the flattener or chapadya who uses seven tools, The masipati a small board about a foot square, with ten upright nails to serve as bobbin axles; the anvil or airan about two inches square and the hammer or hatoda two inches square kept highly polished by emery, together worth about 10s. (Rs. 5); hones or opanis of lac and emery powder worth £2 to £7 (Rs. 10-70) [The workers say pearls and coral are mixed with the emery but this is doubtful.]; the khodsa a buried block of babhul wood, on which the anvil is fixed worth 4s. (Rs. 2); the chippa a piece of leather with small slits for the thread to pass through; the ghodi or ranakhame a hook fixed in the ground to guide the flattened thread,

worth 6d. (4 as.); and the asari a small reel, worth 3d. (2 as.). In flattening the thread, ten full bobbins are set on the masepati or board, and the threads are gathered together and passed through the slits of a piece of leather or chippa which is placed in front of the stand and drawn across a highly polished steel anvil, fixed in a block of babhul wood very little raised above the level of the ground. In flattening the thread the workman firmly grasps his hammer handle between the thumb and the forefinger, and,, with his left hand, draws the threads over the polished steel, and begins to beat. The threads are passed steadily over the anvil and the hammer strokes fall at the rate of sixty to a hundred in the inirute, and with such regularity that no particle of the thread is left unbeaten. As they are flattened the threads are drawn away by the flattener's left hand, and when stretched to arm's length, are caught under some conveniently curved article such as a broken cup handle or a brass hook fixed in the ground, and a fresh grip is taken close to the anvil. When all the threads have been flattened, they are carefully separated, wound round a reel and sent to the twister or valnar. The thread flattener or chapadya is paid £1 10s. to £2 (Rs. 15-20) for beating 100 tolas of thread. If daring the busy season he employs a labourer he pays him £1 8s. to £1 16s. (Rs. 14-18) the 100 tolas. The twister or valnar, who is generally a woman, is the last of the work people through whose hands the thread passes. She uses three tools. A hook or bangle called akada of a nominal value; two spindles or *chatis* worth $1\frac{1}{2}d$. to 6d. (1-4 as.), sometimes made by fixing a round piece of broken China to a nail; and a wooden cylinder or gaj with nails fixed at given distances worth 6d. (4 as.). Contrary to the practice in the other branches of gold-thread making the twister or valnar has to provide part of the material she works up. What she has to buy is the silk-thread which is twisted with the flattened gold-thread. The silk used in making gold-thread is twisted and dyed by a distinct set of workers called dhurevalas, of whom there are twenty to twenty-five establishments at Poona, including sixty to eighty workers. They are either Marathas from Paithan and Burhanpur or they are Pardeshis from Delhi and Agra. They are believed to have come to Poona three to four generations ago. They speak Marathi or Hindustani and live in one-storeyed houses of which five per cent are their own and the rest are hired. They generally live on vegetable food though they are allowed to eat mutton and fish and to drink liquor. They dress in a three-cornered turban, a long coat reaching to the knees, a scarf round the loins, and a second scarf round the shoulders. As a class they are fairly off. Their busy season, working hours, and holidays are the game as those of the bar makers and others employed in making gold thread. They use silk of three kinds, sim, lankin, and banak. All are brought from Bombay, at and about 1s. to

10d. the ounce (5-6 tolas the rupee). The silk is the property not of the thread-makers but of Marwar and Shimpi dealers who pay them by the outturn. A dhurevala or twister and dyer of the silk which is used in making gold and silver thread wants three tools for the twisting and no tools for the dyeing. The appliances for twisting the silk include half a dozen bamboo cages or phalkas each worth 3d. to 6d. (2-4 as.); about thirty small reels or asaris each worth 3d. to 6d. (2-4 as.); and two or three spindles each worth $1\frac{1}{2}d$. to 3d. (1-2 as.). The silk twister places a skein of silk on each of five different cages or phalkas, and from them winds the silk on fifteen different reels or asaris. These fifteen reels are then arranged in a semicircle all facing the same way. The twister draws a thread from each reel, and sitting facing the point of the reels, fastens the threads to a spindle, and rolling the spindle sharply along his thigh, twists a yard or so, winds the twisted thread round the bar of the spindle, gives the Spindle another smart roll along his thigh, and twists another yard of thread. The silk is sometimes twisted out of doors. In out of doors twisting, two couples of uprights are driven into the ground the couples twenty-five to thirty feet apart, and the uprights in each couple four to six feet high and ten feet apart. A horizontal bamboo is fastened across between each pair of uprights and on the upper side of each of the bamboos pairs of pegs are fastened close together at the bamboo and gradually separating in a V shape. In out of door silk twisting the fifteen fibres from the fifteen reels pass through the hollow at the foot of the V. When the silk twister is as much as twenty-five to thirty feet from the reels he can twist a much longer piece of thread at a time that he can twist when he stands close to the reels. The twister is paid $1\frac{1}{2}d$. (1 a.) for each lad of silk twist that is equal to $7\frac{1}{2}d$. an ounce (8 tolas the rupee). When the gold thread twister or valnar gets a supply of the proper twister silk he winds it off the reel on to a spindle. One end of the silk thread is then passed through a bangle or steel ring fastened to the ceiling of her house, drawn down, and tied to a second spindle. The flattened gold thread is then unwound from the reel or asari and dropped in a loose heap on the ground near the twister. The twister sits on a high stool or chair, and, fastening the ends the gold and the silk thread together, rolls the spindle sharply along her thigh and gives it so rapid a whirl that it twists together two or three feet of the gold thread and the silk always keeping the gold on the surface. When the spindle stops the workman winds the finished gold thread round the rod of the spindle, draws down a fresh yard or two of the silk thread, and gives the spindle another whirl by sharply rolling it again along her thigh. The drawing down the silk, whirling the spindle, and twisting together the gold and the silk are repeated till the whole quantity is completed. The finished gold thread is then wound into hanks and

skeins by passing it round two nails fixed to a rod or *gaj*. The *valnar* or twister is paid 1 s. an ounce (5 *tolas* the rupee). Poona gold thread chiefly used locally in ornamenting turban ends and the borders and fringes of robes and dining clothes.

COTTON GOODS.

Cotton weaving is carried on in thirty-seven towns in the district; Jasvad, Kavtha, Pabal, Baramati, Indapur, Pimpalvadi, Junnar, and Utur, are known for *lugdis* or women's robes; Baramati, Kavtha, and Jasvad for silk-bordered dhotis or men's waistcloths, and uparnis or silk-bordered shouldercloths; and Indapur, Palasdev, Lasurna, Nimbgavketki, and Kalas are known for khadi or coarse cloth. Of these the only important centre of cotton cloth handloom weaving is Poona city. Poona city has 400 to 500 cotton handlooms, of which about 450 belong to Hindus, 300 of them Koshtis and 150 Salis, and the remaining fifty Musalmans. Most Hindus weave women's robes or sadis and most Musalmans weave turbans. Cotton handloom weavers are chiefly found in the Somvar, Vetal, Bhavani, Raste, and Shukravar wards. Besides in these wards one or two cotton looms are found in almost every part of the city. Except two families who have come from Madras, the Hindu weavers are said to have come about three generations ago from Paithan, Yeola, Sholapur, Indapur, and Narayan Peth in the Nizam's country. The Musalman weavers came to Poona only four or five years ago from Malegaon in Nasik where they form a large colony. [Compare the Nasik Statistical Account, Bombay Gazetteer, XVI. 167. Except the two Madras families, whose home speech is Telugu, the Hindu weavers of cotton goods speak Marathi, and the Musalman weavers speak Hindustani. All live in one or two storeyed houses, fifteen to twenty of which belong to the occupants, and the rest are hired. The Hindus eat flesh and drink liquor and are a temperate class. The Musalmans seldom eat flesh except on holidays. Many of them drink liquor but seldom to excess. Those Hindu weavers who belong to the Koshti and Sali castes wear either the Deccan Brahman or the three-cornered Maratha turban, a jacket, a long coat, a scarf round the loins and another over the shoulders. The Musalmans wear a cap except a few who have taken to the Maratha turban, a jacket, a long coat, and trousers. The robes woven by the Hindus and the turbans woven by the Musalmans are generally coarss and cheap. The Hindus work from seven to eleven and again from one to sunset; the Musalmans work almost the whole day except a short time for their meals which they generally cook in the same shed or room in which they weave. The chief demand for their wares is during the marriage season that is between November and May. The articles they

weave are intended for everyday use although they are used as marriage presents by Kunbis and other middle and low class Hindus. Hindu cotton weavers stop work on the last or no-moon day of every lunar month, on Nagpanchmi Day in September, on Dasara Day in October, on the day after the great Sankrant in January, during three days of Shimga, during four days at Muharram time, and on the day after every eclipse. The Musalmans stop work only on three *Muharram* days in Ramzan and on the Bakar-id. Both Hindu and Musalman cotton weavers get great help from their women, in reeling, dyeing, warping, and sizing. Some Hindu women even weave. With all this help cottonweavers barely make a living. The articles they turn out are very inferior and are worn only by the poorer classes. The average daily earnings of a cotton weaver's family are said to range from 6d, to $7\frac{1}{2}d$. (4-5 as.), and during the rains they are often short of work. All the varn used in the Poona handlooms is steam-made partly from the Bombay mills and partly from Europe. The yarns generally used are twenties and thirties. To buy the yarn most weavers have to borrow at two per cent a month. The tools and appliances of a Hindu cotton weaver resemble those of the local silk weavers of which an account has already been given. The Musalman weaver is satisfied with cheaper and simpler appliances. He has a smallerloom and has not more than seven tools. The shuttle-beam hatya, in which the reed or phani is fitted worth 6d. (4 as.), two bars or athuyas to keep the warp stretched worth 6d. (4 as.), a beam or tur round which the woven fabric is wound worth 1s. (8 as.), a pair of shuttles or dhotas worth 1s. (8 as.), a large bamboo cage or phalka worth 6d. (4 as.), a reed or phalki worth 3d (2 as.) and a small wheel or rahat for sizing the weft yarn worth 8s. (Rs. 4). The foreign and Bombay yarn undergoes eight processes in being turned into robes or sadis. It is steeped in water and placed on the bamboo cage or phalka. It is changed from this cage to the reel or asari by a woman of the weaver's family who holds the end of the central rod of the cage in her toes, and with her right hand, drawing off the yarn from the skein, winds it on the smaller reel, which she holds in her left hand and whirls round in a small cup of smooth cocoanut shell. To make the skeins of a convenient size, the yarn is next wound off the reel or asari, on to if small conical reel called charki. The yarn is then transferred to the rahat or wheel to be twisted and wound round bobbins or kundis. It is next worked by winding it, two threads at a time, in and out among the rows of bamboo rods about four feet apart. It is then opened on two bamboos, stretched tight between two posts and sized by a large brush dipped in rice paste. If it wants colouring it is dyed before it is sized. The weavers themselves dye the yarn either with German aniline dyes, or they have the yarn steeped first in the indigo vats of the local indigo dyers and

then in safflower dye to make them green, a colour which quickly fades. The general practice is to buy dyed yarn. After the yarn is dyed and sized or sized without dyeing, it goes to the heddle-filler and joiner who is always the same man as the weaver. He joins the warp threads with the threads of an old used warp which he purposely keeps to save the trouble of passing threads in each case through the loops of the heddle, then through the bamboo slips of the reeds or pheni, finally tying them to the turai or warp beam. After joining the warp threads, the weaver has to stretch the whole of the warp and to see if any of the strands of the warp are wrongly joined or are entangled. When all is ready the warp is stretched and the rope tied to its farthest end, passed round an upright, and brought back to the place where the weaver sits. It is there tied either to a peg fixed in the floor to the right of the weaver or to one of the uprights which support the cloth beam or turai. When the weaver has provided himself with a pair of shuttles and a small basket full of loaded bobbins, he sits behind the cloth beam, puts his legs in, the pit below the loom and with one foot on each of the treddles begins to weave. He passes the shuttle with the loaded bobbins between the two sets of the warp threads which are by this time separated by heddles worked by the treddles under the weaver's feet. For the border a separate set of heddles hanging from the roof are balanced by sand bags and are worked by the hand. The Musalman turban loom, except that it is not more than eighteen inches broad and has no heddles, is the same as the robe loom. The Poona cotton weavers take their robes and turbans to the local Shimpi dealers of whom about fifty have shops in Budhavar ward. The robes fetch 4s. to £1 (Rs. 2-10) and the turbans 3s. to 10s. (Rs.1½-5). The local demand especially during the marriage season will probably keep up handloom cotton weaving for some time. Still it seems probable that, in a city where the price of grain and the cost of living is high compared with most parts of the Deccan, the handloom weavers of robes will be driven out of a living by steam-made fabrics. Handloom turban weaving will probably last longer, as, at far, it has been free from machine competition.

GLASS BANGLES.

Glass bangles are made in the village of Shivapur on the Satara road about seven miles south, of Poona by a settlement of Lingayats who are called Kacharis or glass makers. At present (1883) four establishments employ twenty-five to thirty men. They say that they came to this district from villages near Sholapur five or six generations ago, that they used to marry with other Lingayats, but that since they have taken to bangle-making they form a separate caste marrying

among themselves only. They speak Marathi at home, live in their own one-storeyed houses, and never touch animal food. They say that they dress like Brahmans, but when at work they wear only a dirty waistcloth and a rag round the head. They work from nine in the morning to nine at night, and stop work on all Mondays, on the great Sankrant in January, on Mahashivratra in February, for four days during Shimga in March-April, on Nagpanchmi in August, on Dasara in October, and during five days of *Divali* in October-November. Their women and children help in sorting broken pieces of Chinese glass bangles which the men melt and work into new bangles. They buy these broken bangles from the Kanch bangdi phutanevalas that is glass bangle collectors, Marwar Vanis of whom there are fifteen to twenty shops in the Bhavani and Vetal wards in Poona. They gather the glass bangles by going from house to house selling parched gram in exchange for its weight in broken bangles which the children of the house carefully gather and keep. Kasars or dealers in bangles, also ask for and gather broken bangles at any houses they may visit to put new ones round women's wrists. They sell the broken pieces to Kacharis. The current price of the raw materials is $1\frac{1}{2}d$. (1 a.) the pound. Though so little money is wanted the Kacharis generally borrow it in Poona at one to two per cent a month. The glass is sometimes supplied by Kasars or bangle dealers who pay the Kacharis $2\frac{1}{2}d$. to 3d. a pound (3-4 as. a sher) to work it up. Bound balls of country made glass used to be received at Poona from Gutur in the Nizam's country, but for the last eight or ten years no glass has been brought from Gutur as broken bangles furnish as much material as the trade requires. A Kachari's appliances are simple and cheap. Half a dozen bamboo baskets smeared with cowdung serve to store the sorted pieces of glass; six thin two feet long iron bars pointed at one end at 34d. (½ a.) each; six home-made clay crucibles at a nominal cost. The mould called matra or sacha an iron bar with a conical clay top worth about 3d. (2 as.). One end of this iron bar is supported by an upright peg near the fire-place or kiln, the peg having a looped piece of iron on the top to let the bar move round its own axis and the other end rest on a slightly grooved stone. Half a dozen six inch long flat iron paper-cutter shaped blades called *pattas* each worth about 3*d.* (2 *as.*). The akadi, a wooden handled iron rod slightly bent at the point worth about 3d. (2 as.). Six to eight six inch nails or chats with handles each worth about $1\frac{1}{2}d$. (1 a.) Six hammers worth 9d. (6 as.) each. Six flowerpot-shaped earthen pots or Kundis each worth 3/4d. (1/2 a.) A scale with weights or stones and bamboo basket pans worth 3d. (2) as.). Half a dozen long handled hemisperical iron spoons or palis each worth $2\frac{1}{2}d$. ($1\frac{1}{2}a$.). A Kachari's kiln or fire-place is also kept in a separate building or in a small wing of the building in which the

workmen live. A separate bangle-furnace consists of a shed, about twenty feet by twenty-five and ten high, with brick walls with two doors on the south and on the west, and six windows, two each on the north, the south, and the west. The east wall has neither door nor window. The roof is tiled, the central beam being about twenty feet from the floor. Nearly in the centre of the building is the furnace, a round pit three to four feet deep, with a dome-shaped clay top and arched windows each about four inches by six and a hole at the top of the dome provided with a clay lid. Inside the dome is a raised platform on which rest the crucibles or clay smelting pots each opposite its own window. In the space between each pair of windows and a little way from the kiln are six uprights which together with the cross stick form a six-cornered bower over which two to three feet of fresh cut branches are heaped to dry. In front of each of the kiln windows a pair of thick rag screens are hung on the cross sticks of the bower to shade the workmen from the fire. In front of these shades sit the half dozen workmen each with his tools and a basket of broken bangles near him. When the crucibles filled with glass are set on the platform inside the dome of the kiln, the fire is kindled by bringing fuel into the pit through an under-ground passage. At the end of about an hour the glass melts and each of the workmen sits opposite one of, the windows. He stirs the half fluid glass with the bent pointed iron rod or akadi to see if it is uniformly melted. When it if properly malted the workman passes into the molten glass a second sharp pointed iron rod and with it picks out a drop of fluid glass. On taking the drop of glass out of the kiln with a jerk he make the rod spin round and the spinning motion turns the glass drog into a globe. A sharp blow to the iron rod from the patta or iron blade shivers the globe and turns it into a ring on the point at the bar. Repeated blows with the blade on the bar by shaking in widen the ring into a long loop. As soon as the ring is big enough it is dropped over the conical clay point of the mould or sacha and fitted into it with the help of the blade, the left hand all the time keeping the mould spinning in the grooved stone. All this is done with surprising cleverness and speed, less than half a minute serving to turn the glass drop into a finished bangle. If from any delay the glass cools and hardens out of shape, the mould or sacha is held if the kiln flames till the glass is softened and can be worked into the proper shape. The formed bangle is dropped on the floor, the sharp end of the iron bar is heated and hammered straight, and second glass drop is brought out at the bar point, whirled into globe, struck into a ring, widened by vibration, and finished off the turning mould point. The Shivapur Kacharis make three kind of bangles bangdi, gol, and Kaul or karla, the bangdi is slightly conical, the gol globular, and the karla conical with a notched surfac. Finger rings are made in the same way

as bangles. The bangle are in great demand among the poorer classes of Hindu women, all the rings are bought by girls as toys who sometimes wear the round their own fingers and sometimes put them round their dols wrists. The Kacharis carry their bangles and rings to Poona. In the glass is supplied by a Kasar dealer the Kachari is paid 6s. (Rs.3) for thirty-two pounds. If the glass is the Kachari's own he gets about 10s. (Rs. 5) for the *man* of thirty-two pounds. In a day of about twelve hours' work a good bangle-maker can turn out four to five pounds of glass bangles. Deducting the cost of the glass and the fuel, this price represents daily wage of 6d. to 7½d. (4-5 as,). The Kacharis industry is declining under the competition of Chinese glass bangles.

COMBS.

Savai Madhavrav Peshwa (1790 -1795) the tender-hearted sensitive youth, whom Nana Fadnavis' restraints drove to suicide, had scruples about Brahman women using metal hair combs. It was against the sacred books; hair combs should be of ivory not of metal. To supply the new demand for ivory combs one Audutrav Dhandarpalkar came from Nasik and opened the first ivory comb factory in Poona city. His example was followed by Abaji Ava of the carpenter caste. The family of Audutrao cannot (1883) be traced and is said to have died out. The original carpenters have also left Poona and again taken to woodcutting. The present ivory comb makers are the descendants of the Kunbi servants of the original workers. They number about fifteen and keep five workshops opposite the temple of Ganpati in Kasba ward. They are a quiet people, speak Marathi, live in their own one-storeyed houses, occasionally eat flesh, and dress like ordinary local Kunbi Marathas. Comb making is easy to learn. Many Kunbis would have taken to the craft if it had offered a fair chance of making a living, but for many years, owing to the competition of cheap foreign bone combs, the industry has been depressed. Within the last ten years four shops have been closed and those who are left though above want are poor. The present small ivory-comb industry will probably long continue. Brahman and other high caste Hindu women think bone combs impure, and three ivory combs always form part of the vayan or bride's outfit.

Comb-makers work from seven to eleven and from two to sunset. They stop work on *Kar* that is the day following *Mahasankrant* in January, and on *Nagpanchmi* in August. Their women and children give them no help. During the marriage season, between October and May, the demand is brisk, and sometimes a servant or two are employed to

help in doing the rougher parts of the work. The servant is paid 8s. to 14s. (Rs. 4-7) a month according to the nature and quality of his work. The average monthly income of a comb-maker varies from £1 to £1 10s. (Rs. 10-15). As ivory is very costly ranging from about 8s. to about 11s. the pound (Rs. 150-200 the 38 lbs. man) the money required for buying it has to be borrowed. The usual rate of interest paid is one per cent a month. The advances are generally made by a moneylender named Jipa Marwari in whose hands the whole industry practically is. In addition to interest, he charges 1¼ to 1½ per cent as commission on the ivory he brings from Bombay. The workmen have to sell the articles they make on their own account and to pay the standing balance inclding interest and commission to the Marwari moneylender. What they are able to keep back in just sufficient to maintain themselves and their families. All are indebted to the Marwari. The appliances of a comb-maker are similar to those of an ordinary carpenter only a little finer. Each shop requires five to six saws of different sizes worth 9d. to 1s. (6-8 as.); half a dozen files worth 6d. to $7\frac{1}{2}d$. (4-5 as.); four or five borers worth 3d. (2 as.) each; half a dozen vices each worth 10s. to £1 10s. (Rs. 5-15); a vakas or adze worth 2s. (Re. 1); a khatavne worth $1\frac{1}{2}d$. (1 a.); and a compass worth 6d. (4 as.).

When the ivory is brought from the Marwari's shop, after he has weighed it and entered the price in his account book, it is steeped in water for two or three days. It is then cut into pieces of the required size and sawn through, keeping it vertical by holding it in the vice. It is then filed, rubbed and polished. Sometimes the ends and sides are decorated with carvings and the plain surface is broken by tracing on it a few curved and straight lines. Combs for the use of women are rectangular and have a double set of teeth, while men's combs are crescent-shaped and have only one set of teeth. The small pieces of ivory left over in cutting out pieces for combs are used in making dice. The price of a comb ranges from 6*d*, to 2s. (Rs. ¼ - 2) according to the size thickness and workmanship of each. The combs and dice are sold in the workshops by the workers on their own account. Their only customers are high class Hindus. Other classes use either wood combs or foreign hors combs.

CLAY FIGURES.

Among European residents and travellers a favourite product of Poona are clay figures six to eighteen inches high, with in their appearance colour and dress, all that is characteristic of the different castes and classes of Western India. These figures are known as Poona figures

and are made nowhere but in Poona. As present (1884) there are only eight figure-makers in Poona city. The most famous makers of Poona figures have been Bapu Supekar a Jingar and Kaluram Gavandi a bricklayer. These two men were contemporaries and lived about forty years ago. The present workers belong to the Goldsmith, Jingar, and Maratha casted. They speak Marathi, and generally live on vegetable food, but the eat flesh on holidays and special feast days. The goldsmith dress like Brahmans, in a rounded turban, jacket, long cost waistcloth, and shoulder-searf; the rest dress like Kunbis with threecornered turban, long coat, and waist and shouldercloth Besides the eight workers who make the highly finished Poona figures, twenty to twenty-five Jingars, and about two hundred Kumbhars make rough baked clay figures costing about $4\frac{1}{2}d$ (3 as.) the dozen. The Jingars and Kumbhars mould or shap these rough figures a little before the Ganpati holidays in August and the Divali holidays in October-November, when especially at *Divali*, they are in great demand. Shalivahan, the legendary founder of the Shakera, whose initial date is A.D.78, is said to have led an army of clay figures from the Deccan north across the Narbada and defeated Vikramaditya the chief of Malwa. In honour of shis triumph for the Deccan during *Divali* the children of lower class Hindus build small clay castles in front of their houses, and round them arrange an army of clay figures footmen horsemen and gunners. It is the opinion of many well informed people in Poona that this practice was introduced by Shivaji (1627-1680) with the object of fostering a warlike spirit among Maratha children.

The Poona figure-makers are perhaps the only workers in Poona who show artistic skill. The materials used by the Poona figure-workers are: White clay or shadu generally bought from Mhars at 3d. a head-load (8) for Re. 1); Bombay khadu, a chalky clay which is bought from Poona Bohoras at sixteen pounds the shilling, torn country paper called junarikagad costing about $2\frac{1}{2}d$. a pound (10 lbs. the rupee); finely ginned cotton worth a shilling the pound; orpiment or hartal, the yellow sulphide of arsenic worth a shilling the pound; ochre or son geru, kav, worth 1 ½d. (1 a.) the pound; cinnabar or hingul red iodide of mercury worth two shillings the pound; verdigris or *jangal* green arseniate of copper worth its own weight in copper coin; white zinc or sapheda oxide of zine worth a shilling the pound; indigo or nil worth its own weight in copper coin; English carmine worth its own weight in silver; lamp black collected at home; gomutra pevdi a yellow pigment obtained by steeping the powdered flowers of the Butea frondosa palas in cow's urine, worth its own weight in silver; glue or siras, worth 6d, the pound; isinglass worth a shilling a packet bought from European shops; lac bought from Bohoras at 9d. to 1s. (6-8 as.) the pound;

copal varnish worth 3s. to 4s. the pound; blue vitriol, sulphate of copper, and rice flour. These materials are so cheap, and in most cases are required in such small quantities that, unless one customer wants a large number of figures, when some advance is required, even the poorest workers buy them on their own account. A figure-maker's tools and appliances are few and simple. There are five scoopers or gouges, namely korane which is flat and slanting at the end, nakhurde nail-shaped, korni spear-head shaped, kesache korne flat and ridged on one side making hair-like lines in the clay, and dolyache korne grooved on one side. Besides the gouges, they require a pair of pincers or chimtas worth a shilling; a drill or samta worth 6d. (4 as.); half a dozen files or kanas worth together 2s. (Re. 1); and a pair of scissors worth a shilling. The brushes are made of the tails of the Indian squirrel which cost about \(^3\)4d. (\(^1\)2a.\) the piece and are bought from the wandering druggists called Vaidus or Baidus. The shadu or white clay, the *khadu* or chalky clay, and the torn paper are separately steeped in cold water for one day, apparently passed through a sieve though this the workmen deny, and pounded together with the ginned cotton. The proportion of each of these articles is not uniform, each workman using his own discretion on each occasion. When the clay is so thoroughly mixed as to lose all grit or grain it is ready for use. The workman shapes the head putting in a small peg to prop the neck. The arms are next shaped and propped on pegs at the shoulder joints. The trunk and legs are last shaped with two pegs passing through the soles if the figure is standing and one peg passing below the end of the backbone if the figure is sitting. These separate pieces are joined and the figure is left to dry two to six days in the sun. When dry the clay is painted a flesh colour and the eyebrows and moustache, and, if the figure is a Hindu, the brow marks are painted. The colours are made by washing the mineral pigments several times over and mixing them thoroughly with *ahee*-paste for a dark and with isinglass for a lighttint. When the paint dries the workman dresses the figure by gluing on pieces of different fabrics. Finally the figure is fixed into a stand brought from the local turner either with the help of the peg passing below the feet, or, if sitting, by the peg which passes below the back. Of the Poona figures, which include almost all castes and classes, perhaps the most interesting and characteristic are: A fully equipped elephant with a native prince and his attendants in the car or hauda; groups showing how Hindus cook and dine; a scene at a public well; a dancing party; a Hindu spinner, weaver, and goldsmith at work; a European gentleman carried in a palanguin; a Koli, or other highwayman waylaying and extorting money from a Marwari trader; a tiger-shooting scene; a prince or princess attacked by a tiger; a native fruitseller's shop; a native woman carrying water; a milkmaid; a

Garodi or juggler with tame monkeys, snakes, goat, and mongooses; a Darweshi with a tame bear; a Gosavi or Hindu ascetic; a Fakir or Musalman beggar; a Brahman woman worshipping the sacred tulsi plant Ocymum sanctum; an astrologer telling fortunes; a Vaidu or wandering quack; a Parsi man and woman; a waterman with his bullock; a camel driver; a messenger; and the cholera or jarimari worshipper. The prices of these figures range from 18s. (Rs. 9) a dozen to 10s. (Rs. 5) each according to size and make. Among the figures required for the tabut or Muharram bier festival the most common are a dancing girl; a Maratha horseman; a chief on an elephant; a pair of Brahman Maratha officers on horseback; a pair of gymnasts; a prince on an elephant attacked by a tiger; a Maratha officer on horseback helping a damsel to mount his horse; and a prince on foot struggling with a tiger. The figures required for the Muharram biers are the largest made in Poona ranging from two to three feet high and costing £2 to £50 (Rs. 20-500). The figures intended for sale among European and Parsi customers ordinarily range from six inches to eighteen inches in height and from 1s. (8 as.) to £1 (Rs. 10) in price. The average monthly income of the Poona figure-makers is said to vary from £2 to £2 10s.(Rs. 20-25). The figures are either made to order or are sold at the workmen's house. The larger figures required for Muharram biers are bought by Hindus. The demand for Muharram figures is not great as one figure lasts for years. The chief demand is from Europeans and from the Parsi owners of Bombay curiosity shops.

PAPER.

Paper-making is said to have been brought to Poona from Junnar four or five generations ago. The leader of the movement is remembered as Allibhai, a Musalman, as are all the workers in Poona. At present (1883) Kagdipura or the papermen's quarter a part of the Kasba ward has seven work-places or paper factories. According; to the paperworkers the site on which they built their houses and factories was given free of charge by the Peshwa to encourage the craft. Of forty factories only eight remain, seven in Poona and one at Bhamburda just across the Mutha from Kagdipura. The paper-makers know Marathi but speak Hindustani at home. They can afford to eat flesh only on holidays, and drink liquor but not to excess. They live in one-storeyed houses of their own. The men dress like Kunbis in a three-cornered turban, a long coat, a scarf round the loins, and one round the shoulders. Their women wear a robe and bodice like Kunbi women. Their paper is strong and lasting but has no special peculiarity or excellence. They earn barely enough to live on and are constantly borrowing. They work from seven to twelve and from one to sunset.

They stop work on Fridays, Bakar-Ids, five days of Muharram, one of Shabebarat, and three days on the death of a member of the community. Their women and their children over eight help in sorting waste paper. Unlike the practice at Nasik and Junnar where rags are used, at Poona paper is made solely from waste paper bought from Government offices at £1 to £2 & palla, of 240 lbs. As the waste paper is generally bought at auction sales its price varies considerably. The £2 to £5 (Rs. 20-50) required for buying the raw material has to be borrowed from Marwari moneylenders at two or three per cent a month. The Poona paper-makers have stopped using ropes and gunny bags as they require more time and labour to pound and bleach. Six chief tools and appliances are used: The *dhegi* or great hammer, a long heavy beam poised on a central fulcrum worked in a long pit two or three feet deep. The head of the hammer is a heavy block of wood fixed at right angles to one end of the main beam, with its face strengthened by four thick polished steel plates. On the upper surface of the other end of the main beam two or three steps are cut, and the hammer is worked by three or four men together forcing down the beam and letting it rise by alternately stepping on the beam and on the edge of the hole. The cost of the *dhegi* including the cost of the paved pit or hole in which it is worked, is calculated at £5 to £6 (Rs. 50-60). Though every one of the Poona paper factories has a *dhegi*, they have not been in use for ten or twelve years as waste paper does not require heavy hammering. A rectangular teakwood frame or sacha two and a half feet by two, with eight cross bars; it costs 6s. (Rs. 3) and is used in fishing out films of paper from the cistern. A screen or chhapri made of the stalks of the white conical headed amaranth Amaranthus globulus, on which the film of paper rests, when the frame is brought out of the cistern and the water allowed to pass through it, costs 2s. to 4s. (Rs. 1-2). A soft date palm brush or kuncha, costing $1\frac{1}{2}d$. to 3d. (1-2 as.), is used in spreading the sheets against the cemented walls of the room. This brush is not always required as the paper is generally spread in the sun on old scarves or rags. The polishing stones a piece of agate worth 2s. to 4s. (Rs. 1-2). Large shells Cyprcea tigris, which are in use instead of polishing stones, cost 1s. to 1s. 6d. (8-12 as.) a dozen; smooth teakwood boards each about two feet by three, costing 2s. to 2s. 6d. (Rs. 1-1¼), are required to lay the paper on while it is being rubbed with the polishing stone or shell. The process of making paper from weste paper is not so elaborate as the process of making it from sacking. In Poona the paper is torn to pieces, sorted according to colour, moistened with water, and taken to the river and pounded with stones and washed for three days. It is then taken to the cistern. A papermaker's cistern is a cement-lined tank about seven feet by four and

four deep half filled with water. The paper pulp is thrown into this cistern. When it is thoroughly dissolved the workman sitting at the side of the pit, leaning over the water, takes in both hands the square frame which holds the screen which serves as a sieve, passes it under the water and draws it slowly and evenly to the surface, working it so that as the water passes through, a uniform film of pulp is left on the screen. The screen is then lifted up and turned over, and the film of paper is spread on a rag cushion. When layers have been heaped on this cushion nine to fourteen inches high a rag is spread over them, and on the rag is laid a plank weighted with heavy stones. When this pressure has drained the paper of some of its moisture the stories are taken away, and two men one standing at each end of the plank, seesaw over the bundle of paper. When it is well pressed the paper is peeled off, layer after layer, and spreads to dry either on the cemented walls of the building or on rags laid in the sun. When dry each sheet is laid on the polished wooden board and rubbed with a shell till it shines. The paper made by this process though rough and of a dingy yellow is strong and lasting. The makers sell it to Marwari Vani, Bohora, and Gujarati Vani dealers. The price for each gaddi of 240 sheets ranges from 8s to 10s. (Rs. 4-5). The cheaper varieties are generally bought by Government officials for envelopes, and the better kinds command a sale among native merchants who use them for account books for which their toughness and durability make them specially suitable. The retail price varies from 8s. to £2 (Rs.4-20) the ream of ten quires. The paper-makers almost never employ outside labour. The men and women of the family work together, the men doing the heavier and the women the lighter parts of the work. From the much greater cheapness of machine-made imported paper the demand for the local paper is small and declining. The makers are badly off, barely earning a living. They have no trade guild.

IRON POTS.

Poona city has twenty-seven iron pot factories, four of which belong to Telis or oilmen, three to Bohoras, ten to Kunbis, and ten to Malia. The industry employs 150 to 200 workmen Brahmans, Kunbis and Musalmans. All the iron pot factories in Poona city are in the Aditvar ward. The whole of the iron used is brought in sheets through. Bombay from Europe. When at work iron pot makers wear nothing but a waistcloth tied round the hips. On holidays the Brahmans well their own dress, and the rest the three-cornered turban, a long coal and all the Musalmans a waist and shouldercloth. They speed Marathi, and live in one-storeyed hired quarters. Their every-day food is *bajri* or millet cakes and *dal* or pulse with afew ground chilli and some simple

vegetables. Except the Brahmans both Hindu and Musalmans occasionally eat flesh and drink liquor though not to excess. The workers make little more than a living most of the profits going to the dealers. They work even on no-moon day. Their only holidays are Kar that is the day following *Mahasankrant* in January, five days during Shimga in March-April, Ganpati Day in August, and the day after all eclipses. Their busy season begins in Bhadrapad or July-August and lasts till Chaitra or March-April. The women and children do not help the men in their work. They work from sunrise to sunset with half an hour's rest at midday. The iron sheets are bought in Bombay near the Carnac Bridge at 11s. (Rs. 5½) the cwt. to which carriage to Poona adds 1s. 6d. the cwt. The dealers buy the iron sheets with their own capital. The iron pot maker uses nine appliances. Twenty to twentyfive chisels or *chhani* each worth 11/2*d*. (1 *a*.); twelve to fifteen hammers of different sizes each worth 6d. (4 as.); half a dozen pincers or sandsis each worth 3d. (2 as.); two or three heavy iron cylinders each worth 4s. to 5s. (Rs. 2-2½); half a dozen compasses each worth 6d. (4 as.); six to eight large English anvils each worth £1 to £1 10s. (Rs. 10-15); half a dozen thick rounded anvils about six inches across fixed in babhul blocks and half buried in the earth each worth 6s. to 8s. (Rs. 3 -4); about a dozen thick pointed nails for punching holes together worth $4\frac{1}{2}d$. (3 as.); half a dozen yearly renewed files at 1s. 6d. (12 as.) each. In making the iron vessels the iron sheet is laid on the floor and the shape required for the pot is traced with compasses on the sheet and cut out with a chisel. The piece of iron thus separated is then hammered on a solid iron anvil or bangdi, and roughly shaped into a hemisphere. It is next hammered on the large and small anvils, till the shaping is completed. The pieces forming parts of a pot are then nailed together and the joint filled up with putty. Its brim is filed, and the handles, made of iron rods flattened at the ends are rivetted on. The articles made are: The tava a griddle for baking native dainties; the patele a cylindrical pot with a slightly rounded bottom varying from a foot to three feet across and two to three feet deep; a nagara or large drum pot; tanks or hauds for storing water and grain; a pohora or cylindrical water-drawing pot nine inches to a foot across and seven to fourteen inches high; a sieve or chalan used by grain parchers or bhadbunjas; a kudhai or frying pan, a hemispherical pot one foot to six feet across and two inches to two feet deep with two opposite handles; the kail or large flat-bottomed sugar-boiling pan. Of these articles the *patele* or round pot, the *nagara* or drum, the tank or haud, and the frying pan or kadhar used to be made of copper, but among the poor iron is taking the place of copper. The tava or griddle is used by all classes especially by the poor for cooking their millet cakes. The demand for iron ware is steadily on the increase. The

yearly import of iron sheets into Poona ranges from 14,440 cwt. to 24,908 cwt.

TAPE WEAVING.

Tape is woven in Poona city by one hundred to one hundred and fifty Ravals, who have come from Mohol and Sholapur. They are not permanently settled in Poona and visit their homes every year generally during the rains. In Poona they live in a part of the Ganj ward which is known as the Raval guarter. They look like Lingayats and worship Shiv but do not wear the ling. Their home tongue is Marathi. At Poona they live in hired one-storeyed quarters, eat no flesh, but drink liquor. The men dress in a rumal or headscarf, a short coat reaching to the waist, and a scarf round the middle. Tape weaving requires little skill. Most of the weavers are in debt to the tape dealers, and they keep hardly any holidays. They use machine-made yarn for the woof and hand-spun yarn for the warp. Tape is almost the only article in which hand-spun yarn is still used. The machine-made yarn which is almost always twenties, is brought from Bombay by the tape dealers. It is sold or rather given to the weavers on credit at 10s. to 12s. (Its. 5-6) the pound. The coarse hand-spun yarn comes from Sholapur into which it is brought from the Nizam's country. It is sold at Poona at $7\frac{1}{2}d$. (5 as.) the pound. The tape weaver's appliances are simple. A bamboo cage or phalka, or large reel, worth 6d. (4 as.); a vasan or small reel worth 3d. (2 as.); a spindle or phiraki of nominal value; a bamboo shuttle or kande; and a flat wedge-shaped piece of wood with which the woof is driven home, worth 3d. (2 as.) The tape loom is of primitive make. Between two uprights, from a foot to one foot and nine inches high, are placed two horizontal bars one joining the tops and the other the centres of the uprights. To the central horizontal bar are tied a row of loops, each loop two inches long. In arranging the warp, one thread is passed through a loop and the other over the upper horizontal bar, at a spot just above the space between two loops. The weaver sits in front of the uprights, and holding in his right hand a bundle of woof yarn, passes it across through the warp into his left hand and forces the woof home by a blow from the flat wedge-shaped hatya. As he weaves, he slackens the warp which he keeps tied to a peg or beam on the other side of the upright frame. The broadest and thickest tape woven, called padam, is six to nine inches broad and twelve feet long. It is sold at 9d. to $10\frac{1}{2}d$. (6-7 as.) the piece. It is white with black and red bands. A smaller variety called kacha, two to six inches broad and seven to fifteen feet long, varies in price from 1 $\frac{1}{2}d$. to 1s. (1-8 as.). The narrow tape which is less than half an inch broad, is woven by poor Musalman women. It is believed

that at present (1882) in Poona city as many as 150 Musalman women weave narrow tape in their leisure hours earning a shilling or two a month.

FELT.

Felt or burnus is made at Poona by Pinjaris who are settled near the Nainsuk police station and near the temple of Someshvar. Eight or ten shops or rather families are (1883) engaged in making felt. They came to Poona three or four generations ago from Chakan, Khed, and Manchar in Junnar. They have been working in felt for generations and say they do not believe their forefathers ever did any other work. They speak Hindustani at home and Marathi out of doors. They live in onestoreyed hired houses and eat flesh though they generally live on a vegetable diet. The men wear a three-cornered turban, a short coat reaching the waist, and a scarf for the loins. They are poor. Their working hours are from seven to eleven and from one to sunset. They stop work on Fridays, Bakar-Id, and two days in Ramzan. The wool is brought from the shepherds or Dhangars of the villages near Poona in Ashadh or June-July and Shravan or July-August. Goat's hair costs 1 $\frac{1}{2}d$. to $\frac{2}{2}d$. the pound (10-14 lbs. the rupee) and sheep wool $\frac{3}{2}d$. to 4d. the pound (6-8 lbs. the rupee). The tamarind seeds required for sizing are bought in Poona at $1\frac{1}{2}d$. to $2\frac{1}{2}d$. (1-1\frac{1}{2} as a sher of two lbs.) They generally borrow what money is wanted at twelve to twenty-four per cent a year. They work the raw material on their own account and pay their creditors out of the proceeds of the felt. The demand for felt is said to be on the decline on account of the importation of cheap European blankets. The only instrument they require is the teaser which consists of three parts, the bow or *kaman* which is hung from the ceiling, the harp-shaped teaser or dasta, and the dumbbell-shaped striker or *muth* with which the worker strikes the thong or leather string. The whole teaser costs 8s. to 10s. (Rs. 4-5). Besides the dumbbell striker the worker has a stick about two yards long. The wool is first disentangled by the women of the house and teased on the dasta by the men. Men or women then spread it on planks or mats and the tamarind seed paste is spread over it. Another layer of wool is spread on the paste and a layer of paste on the wool till it is half an inch to an inch thick. It is lastly laid in the sun and dried. It is sold in the workmen's houses at 6d. to 4s. (Rs. ¼-2) the piece, the price depending on the size of the article. The whole yearly outturn is not worth more than £200 (Rs. 2000).

WOOD-TURNING.

Six Kataris or hereditary Wood-Turners, ten Kunbis, and one Brahman earn their living at Poona by turning wood. They live in Aditvar ward near Subhansha's mosque and the Gujri market. They speak Marathi, live in one-storeyed hired quarters, and except the Brahman who lives solely on vegetable food, they occasionally eat flesh. The Brahman wears a rounded turban, a long coat reaching to the knees, a jacket, a waistcloth, and a shouldercloth. The Kataris and Kunbis wear a threecornered turban, a long coat, and waist and shouldercloths. They work from seven to eleven in the morning and from one to sunset. They rest on all no-moon days, on the day after the chief or winter Sankrant in January, for two days of *Shimga* in March-April, and for two days after an eclipse. The women and children do not help the men. Their average monthly earnings range from 10s. to £1 (Rs. 5-10). The only kinds of wood they use are the *kuda* Wrightia tinctoria, and the *varas* Heterophragma roxburghii, which they buy from Mhar women who bring it from the forest lands near Poona. A head-load of sticks one to two inches in diameter costs them 2s. to 3s. (Rs. 1-1½) A wood-turner has two tools, the lathe and the chisel. The lathe or thadge, consists of two upright blocks of wood about two feet long six inches broad and six inches high, and two feet apart with a short iron peg or spike on the inner face of each. Of the two blocks of wood one is kept in its place by a heavy stone, the other is movable. The piece of wood to be turned is drilled at each end, the movable part of the lathe, always the left block, is taken away, the wood to be turned is slipped over the two iron spikes and the movable part of the lathe is put back in its place. The workman sits on a board opposite the lathe, and, with his left foot, keeps the movable block in its place. He takes his bow or kaman, a bamboo about three feet long with a loose string, and passing a loop of the string round the right end of the wood to be turned, tightens his bow, and, by moving it sharply at right angles to the lathe, makes the wood spin quickly on the two iron spikes. As it turns, the wood is worked into shape by the double-pointed chisel or vakas held in the left hand. When the wood has been shaped and smoothed, a piece of sealing wax is held close to it, and, by the friction, melted and spread over its surface. The final polish is given by rubbing it with a leaf of the kevda Pandanus odoratissimus. The chief articles turned are: The latne or rolling pin used in kneading wheat bread, a plain wooden bar one to two feet long and two or three inches round; it costs $\frac{3}{4} d$. ($\frac{1}{2} a$) and is not lacquered. The *qudqudi* or *hukka* the hubble-bubble. This is of three parts, the bowl, the handle, and the pipe. The bowl is made of a cocoanut shell with a hole at the top, polished and smoothed on the lathe. The handle which is eight to twelve inches long and three to four inches round, is hollowed, and the outside carved and covered with lac. The pipe is a hollow round stick, nine to twelve inches long and

one inch round, smoothed and lacquered. A hubble-bubble costs $4\frac{1}{2} d$. to 9d. (3-6 as.). Clothes-pegs or khuntis, four to six inches long and two to three round, cost 2s. (Re. 1) a score or kodi. Children's rattles or khulkhulas a lacquered stick two to four inches long and half an inch round, with, at each end, a hollow lacquered ball three to five inches round with a few pieces of stone inside, cost $1\frac{1}{2} d$. (1 a.); kathadas or balusters upright sticks six inches to three feet long, and half an inch to six inches round, lacquered, and varying in price from $1\frac{1}{2} d$. to 6d. (1-4 as.) a stick. Rulers or akhanis, one to two feet long and one to two inches round, are not coloured and cost $1\frac{1}{2} d$. to $4\frac{1}{2} d$. (1-3 as.). Walking sticks or kathis are generally supplied rought by the customer and turned for 3d. to 6d. (2-4 as.). All of these articles are sold in the turner's shops. They have no special merit and are not in much demand. The women do not help the men.

HISTORY

EARLY HISTORY

EARLY HINDUS. B.C.100-A.D.129

IN prehistoric times, like the rest of the Deccan, Poona is said to have formed part of the Dandakaranya or Dandaka forest, which the Ramayan represents as infested by Rakshasas or wild men who disturbed the religious rites of Brahman sages. A high and ancient holiness attaches to Bhimashankar the source of the Bhima, forty-five miles north-west of Poona, the Shivling of whose temple is one of the twelve great *lings* of India. [Indian Antiquary, II. 15 and note 1. The eleven other great *linga* are: Amareshvar near Ujjain; Gautameshvar unknown; Kedareshvar in the Himalayas; Mahakal in Ujjain; Mallikarjun on the Shrishail hill in Telingana; Omkar in the Narbada; Rameshvar on Rameshvar island near Cape Comorin; Someshvar in Somnath-Patan in Kathiawar; Trimbakeshvar at Trimbak in Nasik; Vaidyanath at Devgad in the Santhal district of Bengal; and Vishveshvar at Benares.]

From very early times trade routes must have crossed the Poona district down the Sahyadri passes to the Konkan seaports of Sopara Kalyan and Cheul. Rock-cut temples, rest-chambers, and inscriptions show that as far back as the first centuries before and after Christ trade went to and from the coast by the Nana and the Bor passes. The richness of the rock-cut temples both above the pass at Bedsa Bhaja and Karli, and below the pass at Kondane and Ambivli make it

probable that in the first centuries after Christ a great traffic moved along the Bor pass route. The early history of the district centres in Junnar, on the Nana pass route, fifty miles north of Poona, a city strongly placed, in a rich country, with a good climate, and facilities for trade. Two considerable groups of caves one near Kalamb about twelve miles south of Junnar, the other round Talegaon about thirty miles south-west of Kalamb, now on the main line of traffic from Junnar to the railway, apparently mark the old trade route from Junnar to the Bor pass. Of the founders of Junnar nothing is known. Even its early name has perished, if, as is generally supposed, the present name Junnar means Old City. Pandit Bhagvanlal gives Junnar its old name by identifying it with the Tagara of Ptolemy (A.D. 160) and of the Periplus (A.D. 247). The arguments in support of the identification are the antiquity of Junnar as proved by its numerous caves and inscriptions, its position at the head of a highway of commerce, and its comparative nearness to Shelarvadi which Professor Bhandarkar finds to be the only name connected with the Konkan Silaharas, who call Tagara their original city (Bombay Gazetteer, XIII. 423; Professor Bhandarkar's Deccan Early History); and still more the position of the city between the three hills or trigiri of Lenadri, Manmoda, and Shivner, from which it might have been called *Trigiri* corrupted into Tagara. The chief argument against this identification is that the position of Junnar, 100 miles west of Paithan, does not agree with Ptolemy or with the author of the Periplus both of whom place Tagara ten days east of Paithan. A minor objection is that a seventh century copperplate recording a grant to an inhabitant of Tagara has been found in the Nizam's Haidarabad which agrees with the position of Ptolemy's and the Periplus' Tagara (compare Bombay Gazetteer, XIII. 423). The town is probably as old as the large inscription on the walls of the rock-cut chamber at the head of the Nana pass which was engraved by a Deccan king one of whose capitals was probably at Junnar and whose date probably lies between B.C. 90 and A.D. 30. Next to Ashok's (B.C. 250) edicts at Girnar in Kathiawar and Sopara near Bassein in Thana, the Nana pass inscription is the oldest writing in Western India. It is believed to be the earliest historical record in the Deccan, and has the special interest of being the oldest known Brahmanical inscription in the whole of India. In the beginning salutations are offered to Vedic and Puranik gods, to Dharma and to Indra, to Chandra the moon, Surya the sun, Agni fire, and Marut wind, to the four region-guardians or *lokapals* who preside over the four quarters of the universe, Yama, Varuna, Kubera, and Vasava, and to Sankarshana Krishna's brother and Vasudeva or Krishna. It mentions a pious king of Dakshinapatha or the Deccan, a staunch supporter of the Vedic religion and strictly Brahmanical in his beliefs. It gives a long

account of Vedic sacrifices from the first ceremony of fire-placing or agnyadhan to the great horse or ashvamedha and other sacrifices. Mention is made of gifts of villages, elephants, horses, chariots, and of thousands and ten thousands of cows and karshapan coins. This inscription has the high value of showing that about B.C. 90 Buddhism had not yet triumphed over Brahmanism, and that the sacrifices of the Vedic age were still in use. The inscription was engraved by king Vedishri, who, as king of Dakshinapatha, probably improved the Nana pass, cut the rest-chamber for the use of travellers, and, in this large inscription, recorded the power and the piety of his family. Vedishri belonged to the great Andhrabritya or Shatakarni dynasty. The Shatakarnis, who are better known by their Puranik name of Andhrabhrityas, were a powerful Deccan dynasty which is supposed to have flourished in the two centuries before and the three centuries after the Christian era. Their original seat was Andhra or Telangan and their capital Dharnikot at the mouth of the Krishna. At the height of their power (A.D. 10-140?) they appear to have held the whole breadth of the Deccan from Sopara in Thana to Dharnikot near the mouth of the Krishna. Their inscriptions and coins have been found at Kanheri and Sopara in the Konkan, at Junnar, Karhad, Kolhapur, and Nasik in the Deccan, at Banavasi in North Kanara, at the Amravati tope in the Kistna district, and in other parts of the Madras Presidency. Details are givenin Bombay Gazetteer, XIII. 409; XVI. 181-183, 620-623. Several inscriptions, over what once were statues in the Nana pass chamber, are supposed to give Vedishri's pedigree mentioning Simuka Shatavahana his grandfather, [According to the Puranik lists Simuka, Sindhuka, or Sipraka was the founder of the Andhrabhritya dynasty. Sewell's Dynasties of Southern India, 5. Shri Shatakarni and queen Nayanika his parents, and his two sons Prince Hakushri and Prince Shatavahana Later in date than the great Nana pass inscription are the Buddhist caves, about 150 in three groups at Junnar, ten at Karle, twelve at Bhaja, two at Bedsa, and twenty at and near Shelarwadi probably all of about the first and second centuries after Christ. The Ganesh Khind and Bhambhurda caves near Poona have no inscriptions. The Bhambhurda rock temple appears to be a Brahmanical work of about the eighth century. The Ganesh Khind caves are plain cells whose age cannot be fixed. The Kalamb caves which are mentioned by Mr. Elphinstone in 1815 (Colebrooke's Elphinstone, 1 283) have not yet (May 1884) been examined.] These rock temples contain seventy-five inscriptions also of the first and second centuries after Christ. The Karle and Junnar inscriptions give the names of kings Pulumavi and Nahapana, an inscription over one of the Nanaghat cisterns gives the name of Chatarpana Shatakarni son of Vasishthi, and a Bedsa inscription mentions a Mahabhoja's daughter

and a Maharathi's wife. [One of the Nana pass statue inscriptions (B. C. 90) also mentions a *Maharathagranika*, which may mean either a leader of large chariot fighters or, as is more probable, a leader of Marathas. In the latter sense Marathas would seem to mean Great Rattas, or Reddis, afterwards (760-973) the Ratta and Rashtrakuta kings of the Deccan and Karnatak. See Fleet's Kanarese Dynasties, 31-38, 79-83. The Bedsa inscription seems to show that the Mahabhojas married with the Maharathis. Deccan Early History, 10. Among places, a Bedsa inscription mentions Nasik, two Junnar inscriptions mention Broach and Kalyan, and the Karle inscriptions mention Abulama perhaps Obollah at the head of the Persian gulf, [Compare Bombay] Gazetteer, XIII. 421 note 2.] Dhenukakat or Dharnikot at the mouth of the Krishna, Sopara in Thana, and Vaijayanti or Banavasi in North Kanara. Among donors the Junnar inscriptions mention three Yavans, a Shak, a Brahman minister, a goldsmith, and guilds of bamboo makers, coppersmiths, and corn dealers; the Karle inscriptions mention a goldsmith, carpenters, two Yavans, and two Persians or Parthians. [Bombay Archaeological Survey Report, IV. 89-114; Separate No. X. 22-55. The workmanship of many of the caves, especially of the chapel in the Ganesh Lena group at Junnar the magnificent cathedral at Karle and the temple cave at Bedsa, [See under Places, Bedsa. have the special interest of showing in the animal capitals of their pillars strong foreign, probably Parthian, element. Of the Mahabhoja mentioned in the Bedsa caves nothing is known except that inscriptions in the Kuda caves in Kolaba show that about the same time a dynasty of Bhojas was roling in the Konkan. [The Bhojas and Mahabhojas appear to be a very old Deccan dynasty, as along with the Petenikas or rulers of Paithan on the north-east border of Ahmadnagar, Bhojas appear among Deccan kings in the thirteenth of Ashok's rock edicts (B.C. 250). Ind. Ant. X. 272.], The Pulumavi mentioned in the Junnar and Karle inscriptions seems to be the Pulumavi Vasishthiputra of the Nasik inscriptions whose date lies between A.D. 10 and A.D. 150; [Deccan Early History, 20; Bombay] Gazetteer, XVI. 623. Chatarpana is known to be the father of a later Andhrabhritya king Yajnashri Shatakarni one of whose silver coins has been found in Sopara; [Bombay Gazetteer, XIV. 288, 332.] and Nahapana, whose name occurs in an inscription of his minister at Junnar and of his son-in-law Ushavdat at Karle, [Ushavdat appears to have been the Gujarat and Konkan viceroy of Nahapana. His Karle and Nasik inscriptions mention gifts made at Somnath Pattan in Kathtawar and at Broach, as well as at Sopara in Thana and at Govardhan near Nasik, See under Places, Karle. is suppesed to be a Parthian or Shak viceroy whose date probably lies between B.C. 40 and A.D. 120. [Deccan Early History, 27; Bombay Gazetteer, XVI. 620.] In Professor

Bhandarkar's opinion Nahapan's minister's and other inscriptions at Junnar favour the view that Junnar was Nahapan's capital. [Deccan Early History, 22. If Junnar was the capital of Nahapana, the name Junnar may be not the old city, which, where there is no new city, is unmeaning, but the Yavans' city. In support of this suggestion it may be noticed that at the head of Ptolemy's (A.D. 150) Nanaguna (which apparently is the Nana pass though Ptolemy makes it a river), to the south of Nasik and to the east of Sopara is a town called Omenagara (Bertius' Ptolemy 174 and Asia Map X.), which, as the Yavans were also called Mins (Archaeological Survey of India Report, II. 45, 54) may be Minagara or Yavanagara that is Junnar. For the 900 years ending early in the fourteenth century with the Musalman overthrow of the Devgiri Yadavs no historical information regarding Poona is available. Not a single stone or copperplate inscription has been found in the Poona district belonging to the three great dynasties of Chalukyas (550-760), The name Chalukya is derived by tradition from chulka, chaluka, or chuluka, a waterpot, from which their ancestor is said to have sprung. This appears to be a late story, as, though chaluka or chuluka a waterpot may be the origin of the later forms Chalukya in the Deccan and Chalukya in Gujarat, it cannot be the origin of the early name which is written Chalkya, Chalukya, and Chalukya. They claim to belong to the Somvansh or lunar race and mention a succession of fifty-nine kings, rulers of Ayodhya, and after them sixteen more who ruled over the region of the south. The names of seven early Chalukya kings have been found who reigned from about 550 to 610. In 610 the Chalukya dominions were divided into an eastern kingdom whose head-quarters were Vengi in the delta of the Krishna and the Godavari, and a western kingdom whose headquarters are believed to have been at Badami in Bijapur. Of this western branch called the Western Chalukyas the names of six kings have been found who ruled from 610 to 760 about which time they were overthrown by the Rashtrakutas. Several attempts were made by the dynasty, to regain its power but unsuccessfully until 973 when Taila II. destroyed the Rashtrakutas, and, under the slightly changed name of (Western) Chalukyas, up to about 1190, thirteen of his successors ruled over the greater part of the Deccan and the Karnatak. Details are given in Fleet's Kanarese Dynasties, 17-30, 39 - 56.] Rashtrakutas (760-973), [It is not certain whether the Rashtrakutas were northerners or a family of Rattas or Reddis the widespread tribe of Kanarese husbandmen who were formerly the strongest fighting class in the Karnatak and Maisur. Mr. Fleet seems to incline to a northern origin and to trace the name to Rashtrakuta or Rashtrapati, a title meaning a district head who is subordinate to some overlord. But it seems not improbable that the Rashtrakutas were Rattas or Reddis,

and that the main branch when they rose to supreme power Sanscritised their name, while the side branch of Rattas who ruled as underlords at Saundatti and Belgaum and claimed a common origin with the Rashtrakutas kept their original name. The names of about twenty Rashtrakuta kings have been found, the seventh of whom Dantivarma II. overthrew the Western Chalukyas about 760. His fifteen successors were powerful soverigns who ruled till 973 when the last of their race, Kakka III., was defeated and slain by the revived Western Chalukyas, better known under the slightly changed name of Western Chalukyas. Details are given in Fleet's Kanarese Dynasties, 31-38. and Devgiri Yadavs (1190-1295). The Devgiri Yadavs (1150-1310) were a dynasty of ten powerful kings who, before the Musalman conquest (1295) held almost the whole of the Deccan, the Konkan, and the Bombay Karnatak. Their capital was originally at a place called Tenevalege, then at Vijaypur or Bijapur, and lastly at Devgiri the modern Daulatabad in the Nizam's territories. Their greatest king was the ninth, Ramchandra or Ramdev (1271-1308), whose minister was Hemadri or Hemadpant the reputed builder of the widespread Hemadpanti temples of the Deccan. Still, as inscribed stones and copperplates have been found in the neighbouring districts of Ahmadnagar Sholapur and Satara, it is probable that the Early and Western Chalukyas held the Poona district from about 550 to 760; the Rashtrakutas to 973; the Western Chalukyas to 1184; and the Devgiri Yadavs till the Musalman conquest of the Deccan about 1300. The only recorded traces of these early Hindu dynasties are the Shaivite rock temple at Bhambhurda two miles west of Poona, and scattered Hemadpanti remains varying from the tenth to the thirteenth century. The chief Hemadpanti remains are the Kukdeshvar temple at Pur ten miles north-west of Junnar, ponds at Behle twenty-one miles northeast of Junnar, and at Pabal twenty-five miles north-east of Poona, transformed mosques at Poona, Junnar, and Sasvad, and the Ganga and Jumna rock-cut reservoirs on the top of Shivner fort in Junnar. The broken Ganpati at the foot of the dismantled rock-cut ladder in the middle of the east or Junnar face of the Shivner scarp appears also to belong to the time of the Devgiri Yadavs, and to show that Shivner was used by them as a fort. According to Ferishta (Briggs Edition, II. 436) Chakan as well as Shivner was an early Hindu fort. See under Places, Junnar and Chakan.]

Under the Devgiri Yadavs much of the country is said to have been divided among Maratha or Koli hill chiefs or *paligars;* [Grant Duff's Marathas, 24.] except to Nag Naik the Koli chief of Sinhgad no reference to any Poona local chief has been traced.

MUSALMANS **1294-1760**.

Delhi Governors, 1318-1347.

The first Musalman invasion of the Deccan took place in 1294, but the power of the Devgiri Yadavs was not crushed till 1318. [Briggs' Ferishta, I. 304. In 1294 Ramdev the ruling king of Devgari was surprised in his capital by Ala-ud-din Khilji the nephew of the Delhi emperor Jalal-ud-din Khilji, and forced to pay tribute. In 1297, Ramdev gave shelter to Rai Karan the refugee king of Gujarat, and neglected to pay tribute for three years (Ditto, I. 365). In 1306 Malik Kafur Ala-ud-din's general reduced the greater part of Maharashtra, distributed it among his officers, and confirmed Ramdev in his allegiance (Ditto, I. 369). In 1310 Ramdev was succeeded by his son Shankardev who was not well affected to the Musalmans (Ditto, I. 373). In 1312 Malik Kafur marched a third time into the Deccan, seized and put Shankardev to death, wasted Maharashtra, and fixed his residence at Devgad (Ditto, I. 379), where be remained till Ala-uddin in his last illness ordered him to Delhi. During Malik Kafur's absence at Delhi, Harpaldev the son-in-law of Ramdev stirred the Deccan to arms, drove out many Musalman garrisons, and, with the aid of the other Deccan chiefs, recovered Maharashtra. In 1318 Mubarik Khilji, Ala-ud-din's son and successor, marched to the Deccan to chastise Harpaldev who fled at the approach of the Musalmans, and was pursued, seized, and flayed alive. Mubarik appointed Malik Beg Laki, one of his father's slaves, to command in the Deccan, and returned to Delhi. (Ditto, I. 389). From 1318 Maharashtra began to be ruled by governors appointed from Delhi and stationed at Devgiri. At first the conquest of the country was imperfect. In 1340 the Delhi emperor Muhammad Tughlik (1325-1351) who, in 1338, had made Devgiri his capital and changed its name to Daulatabad or the City of Wealth, marched against the fort of Kondhana the modern Sinhgad about ten miles south of Poona. Nag Naik, the Koli chieftain, opposed him with great bravery, but was forced to take refuge within the walls of the fort. As the only way to the hill top was by a narrow passage cut in the rock, Muhammad, after fruitless attempts on the works, blockaded the fort. At the end of eight months, as their stores failed them, the garrison left the fort, and Muhammad returned to Daulatabad. Three years later (1341) Musalman exactions caused a general revolt in the Deccan, which, according to Ferishta, was so successful that in 1344 Muhammad had no part of his Deccan territories left him except Daulatabad. [Briggs' Ferishta, I. 426-427. This statement seems exaggerated. In 1346 there were Musalman governors at Raichur, Mudkal, Kulbarga, Bedar, Bijapur, Ganjauti,

Raibag, Gilhari, Hukeri, and Berar. Ditto, 437.] In 1346 there was widespread disorder, and the Delhi officers plundered and wasted the country. [Briggs' Ferishta, I. 432-433.] These cruelties led to the revolt of the Deccan nobles under the able leadership of an Afghan soldier of fortune, named Hasan Gangu.

Bahmanis, 1347-1490.

The nobles were successful, and freed the Deccan from dependence on Northern India, Hasan Briggs' Ferishta, II, 285-291, Hasan Gangu, the first Bahmani king, was an Afghan of the lowest rank and a native of Delhi. He farmed a small plot of land belonging to a Brahman astrologer, named Gangu, who was in favour with the king of Delhi. Having accidentally found a treasure in his field, Hasan had the honesty to give notice of it to his landlord. The astrologer was so struck with his integrity that he exerted his influence at court to advance Hasan's fortunes. Hasan thus rose to a great station in the Deccan, where his merit marked him out among his equals to be their leader is their revolt. He assumed the name of Gangu in gratitude to his benefactor, and from a similar motive added that of Bahmani or Brahmani by which his dynasty was afterwards distinguished. Elphinstone's History of India, 666. The Bahmani dynasty consisted of the following eighteen kings, who were supreme for nearly 150 years (1347 -1490) and continued to hold power for about thirty years more:

The Bahmanis, 1347 - 1526.

| NAME. | Accession. | NAME. | Accession. |
|--------------------|------------|--------------------|------------|
| 1 Ala-ud-din Hasan | 1347 | 11 Humayun | 1457 |
| Gangu | 1347 | 12 Nizam | 1461 |
| 2 Muhammad I | 1388 | 13 Muhammad II. | 1463 |
| 3 Mujahid | 1375 | 14 Mahmud II. | 1482 |
| 4 baud | 1378 | | |
| 6Mahmud I | 1378 | Nominal Kings. | |
| 6 Ghaias-ud-din | 1397 | | |
| 7 Shams-ud-din | 1397 | 15 Ahmad II. | 1518 |

| 8 Firoz | 1397 | 16 Ala-ud-din III. | 1520 |
|-------------------|------|--------------------|------|
| 9 Ahmad I. | 1422 | 17 Vali | 1822 |
| 10 Ala-ud-din II. | 1433 | 18 Kalim | 1626 |

]

founded a dynasty, which, in honour of his patron a Brahman, he called Bahmani, and which held command of the Deccan for nearly 150 years. The Bahmani capital was first fixed at Kulbarga about 225 miles south-east of Poona, and in 1426 was moved to Bedar or Ahmadabad-Bedar about 100 miles further east. By 1351 Ala-ud-din Hasan Gangu Bahmani, by treating the local chiefs and authorities in a liberal and friendly spirit, had brought under his power every part of the Deccan which had previously been subject to the throne of Delhi. [Briggs' Ferishta, II. 291-232; Grant Duff's Marathas, 25. In 1357, Ala-ud-din divided his kingdom into four provinces or tarafs, over each of which he set a provincial governor or tarafdar. Poona formed part of the province of Maharashtra, of which Daulatabad was the centre and which included the country between Junnar, Daulatabad, Bid, and Paithan on the north, and Poona and Cheul on the south. This was the chief province of the kingdom, and was placed under the charge of the king's nephew. [Briggs' Ferishta, II. 295.] In the later part of the fourteenth century, under the excellent rule of Muhammad Shah Bahmani (1358-1375), the banditti which for ages had harassed the trade of the Deccan were broken and scattered, and the people enjoyed peace and good government. [Briggs' Ferishta, II. 325, 326.] This period of prosperity was followed by the awful calamity of the Durga Devi famine, when twelve rainless years (1396-1407) are said to have wasted the country to a desert. In the first years of the famine Mahmud Shah Bahmani (1378-1397) is said to have kept ten thousand bullocks to bring grain from Gujarat to the Deccan, and to have founded an orphan school in each of the seven leading towns of his dominions. [Briggs' Ferishta, II. 349-350. These seven towns were Cheul, Dabhol, Elichpur, Daulatabad, Bedar, Kulbarga, and Kandhar.] No efforts of any rulers could preserve order or life through so long a series of fatal years. Whole districts were left without people, and the strong places fell from the Musalmans into the hands of local chiefs. [Grant Duffs Marathas, 26.] Before the country could recover it was again wasted by two rainless years in 1421 and 1422. Multitudes of cattle died and the people broke into revolt. [Briggs' Ferishta, II. 405. 406. In 1429 the leading Bahmani noble, whose title was always

Malik-ul-Tujar, that is Chief of the Merchants, went through the Deccan restoring order.

So entirely had the country fallen waste that the old villages had disappeared and fresh ones had to be formed generally including the lands of two or three old villages. Land was given to all who would till it free of rent for the first year and for a horse-bag of grain for the second year. This settlement was entrusted to Dadu Narsu Kale an experienced Brahman, and to a Turkish eunuch of the court. [Grant Duff's Marathas, 26. In 1443 the Malik-ul-Tujar, who was ordered to reduce the seacoast or Konkan forts, fixed his headquarters at Chakan, a small fort eighteen miles north of Poona, and secured Shivner the famous hill fort of Junnar. [Malik-ul-Tujar's fort is probably the present fort of Chakan. According to a local story the original fort was built by an Abyssinian in 1295. Grant Duff's Marathas, 27.] From Junnar he several times sent detachments into the Konkan. An expedition which he commanded in person ended in disaster. His Deccan and Abyssinian troops refused to advance into the woody country, and the Malik-ul-Tujar with 500 Moghals was surrounded and slain. [Briggs' Ferishta, II. 436 - 439.] The rest of the Moghals retired. Contrary to the advice of the Deccan officers, who tried to persuade them to withdraw to their estates, the Moghals fell back on Chakan. The Deccan officers sent false word to the king that the disaster was due to the Malik-ul-Tujar's rashness and to the turbulence and disobedience of the Moghals, who, they said, were now in revolt. The king ordered the Moghals to be put to death, and the Deccan nobles attacked Chakan. After the siege had lasted for two months, the Deccan officers forged a letter from the king and persuaded some of the Moghals to leave the fort. They gave an entertainment to the rest in the fort, and while the feast was going on, attacked them and put them to death. At the same time one party of Moghals outside of the fort were attacked and every male was put to death. Another party who were more on their quard made good their escape. The survivors succeeded in convicting the Deccan nobles of their treachery and procured their punishment. [Briggs' Ferishta, II. 440 - 447.] From this time Chakan and Junnar continued military posts. In 1472 and 1473 a failure of rain so wasted the country that in 1474 when rain fell scarcely any one was left to till the land. [Briggs' Fershta, II. 483, 493,494. The power and turbulence of their provincial governors was a source of weakness and danger to Bahmani rule. To remove this evil Mahmud Gawan, the very learned and able minister of Muhammad Shah Bahmani II. (1463-1482), framed a scheme under which the territories were divided into eight instead of into four provinces; in each province only one fort was left in the Governor's hands; all others were entrusted to captains and garrisons appointed and paid from headquarters; the pay of the captains was greatly increased and they were forced to keep their garrisons at full strength. [Briggs' Ferishta, II. 503,604.] This scheme for reducing their power brought on Mahmud Gawan the hatred of the leading nobles They brought false charges of disloyalty against him. The king was weak enough to believe them and foolish enough to order the minister's execution. Bahmani power never recovered the murder of Mahmud Gawan.

Under the Bahmanis, to control the Kolis and other wild hill tribes, their chiefs were given the rank of nobles or *sardars* and some of them were called *mansabdars* or honourables. One of the headmen of each *maval* or western valley was made a captain or *naik*, and, over the whole west, a tract which was known as the Fifty-two Valleys or *Bavan-Mavals*, a head captain or *sarnaik* was named whose headquarters were at Junnar. [Captain Mackintosh in Jour. Bom. Geog. Soc. I. 238. This arrangement was continued by the Ahmadnagar kings and by the Moghals. The last head captain was Muhammad Latif about 1670.]

Of the state of the Poona Deccan, at the time of the decay of Bahmani power, the Russian traveller Athanasius Nikitin (1468-1474) has left some particulars. [Major's India in the Fifteenth Century, Athanasius Nikitin, 9-12.] Athanasius, who was at the time trading in horses, after a voyage through a sea swarming with pirates reached Cheul in Kolaba about thirty miles south of Bombay. After a week's Stay at Cheul he started with a valuable stallion and went by land eight days to Pili to the Indian mountain, apparently Pulu Sonalu in Thana near the foot of the Nana pass. From Pulu he went in ten days to Umri, probably for his horse's sake avoiding the Nana pass, and ascending to the Deccan by some other route. From Umri, which has not been identified, he went in six days to Jooneer, that is Junnar, bringing his horse safely, but at a cost of about £16 (100 roubles). On the way, as was the custom for foreign travellers, Athanasius stopped at inns where the landlady cooked the food, made the bed, and slept with the stranger. Junnar stood on a stony island, no human hands had built it, God made the town; a narrow road which it took a day to climb, broad enough for only one man at a time, led up the hill. At Junnar lived Asat Khan a tributary of Maliktuchar that is Malik ul-Tujar the governor of Daulatabad. Asat Khan held seven of Malik-ul-Tujar's twenty-seven tmas that is thanas or posts. He had been fighting the Kafars, that is the infidels or Hindus, for twenty years, being sometimes beaten, but mostly beating them. Asat Khan rode on men, though he had many good elephants and horses. Among his attendants were many

Khorasanians, some of whom came from the countries of Khorasan, Oroban, Sarkemsk, and Chevotan. All came by sea in tavas or Indian ships. The winter began from Trinity Day in June, and Athanasius wintered at Junnar living there for two months. For four months day and night there was nothing but rain and dirt. The people were tilling the ground, sowing grain, tutu regan, perhaps tur and ragi, peas and all sorts of vegetables. From the translation Athanasius seems to have used the Russian wheat in the general sense of grain. The grain must have been millet.] Wine was kept in large Indian goat skins. Horses were not born in the country, but oxen and buffaloes were, and were used for riding, carrying goods, and every other purpose. The horses were fed on peas, also on *khichiri* boiled with sugar and oil. In the early morning they got shishenivs (?). In the winter the common people put on a *fata* or shoulder cloak, sometimes wearing it round the waist, sometimes on the shoulders, and sometimes on the head. The princes and nobles wore trousers, a shirt, and a long coat, and three scarfs, one on the shoulder, another round the waist as a belt, and a third round the head. While he was at Junnar Asat Khan took Athanasius' horse, and, hearing he was no Mahammadan but a Russian, said he would give him back the horse and a thousand pieces of gold, if he would embrace the Muhammadan faith; if he refused to embrace the Muhammadan faith he would keep the horse and fine Athanasius a thousand pieces of gold. During the four days which Asat Khan gave him to consider his offer, a man named Khoza Iocha Mahmet came from Khorasan and took pity on Athanasius, went to the Khan, prayed him not to insist on Athanasius' conversion and brought him back his horse. Christian brethren of Russia, says Athanasius, whoever of you wishes to go to the Indian country may leave his faith in Russia, confess Muhammad, and then proceed to the land of Hindustan. Those Musalman dogs have lied to me, saying I should find here plenty of our goods; there is nothing for our country; the goods are for the land of Musalmans, as pepper and colours and these are cheap.

In 1477 Mahmud Gawan was succeeded in the office of minister by Nizam-ul-Mulk Bhairi. [Nizam-ul-Mulk Bhairi was a Vijayanagar Brahman from Patri whose original name was Timappa, the son of Bhairu. In his infancy he was taken prisoner by the Muhammadan army of Ahmad Shah Bahmani (1422-1435). On becoming a Musalman he received the name of Hasan, and was brought up as one of the royal slaves. The king was so struck with his abilities that he made him over to his eldest son Prince Muhammad as a companion, with whom he was educated and became an excellent Arabic and Persian scholar. From bis father's name Hasan was called Bhairu and this the prince

changed to Bhairi, the Falcon, or, according to some accounts, the falconer an office which he is said to have held. When Muhammad succeeded to the throne he made Hasan a commander of a thousand horse, Briggs' Ferishta, III, 189-190. About 1485, Bid and other districts including Poona were added to the estates of Nizam-ul-Mulk, and the management of part of it was made over to the minister's son, Malik Ahmad, the founder of the Nizam Shahi dynasty (1490-1636). Malik Ahmad made Junnar his headquarters. In 1486 Zain-ud-din, who had command of Chakan, went into revolt, and Nizam-ul Mulk ordered his son Malik Ahmad to reduce Chakan. Zain-ud-din applied for help to Yusuf Adil Khan of Bijapur, who sent 6000 horse which he ordered to encamp near the fort of Indapur, which belonged to Tusuf Adil Khan, and watch Malik Ahmad's movements. Besides the Musalman commandant of Chakan, other chiefs, several of whom were Hindus, held places of strength in Malik Ahmad's new estates. Some of these chiefs, on the plea that the king was a boy and that such changes should not be made till he came of age, refused to give up their forts. Among them was the Maratha commandant of Shivner, the hill fort of Junnar. Malik Ahmad attacked the fort, and after a long siege the garrison surrendered. The capture of Shivner was of the greatest importance to Malik Ahmad, as five years' revenue of Maharashtra was stored in the fort. This treasure enabled Ahmad to make rich presents to his officers and troops, and helped him to secure all the places of the greatest strength in west and south-west Poona. Among the forts which fell into Ahmad's hands, in consequence of his success at Junnar, are mentioned Chavand and Jivdhan within ten miles west of Junnar, Lohogad about thirty miles north-west of Poona, Koari about five miles to the south-west of Lohogad, Kondhana, the modern Sinhgad about eight miles south, and Purandhar about eighteen miles south-east of Poona; Mahuli in Thana, and Pali in Bhor about twelve miles south Kolaba.

Nizam Shahis, 1490-1636.

In 1486 Nizam-ul-Mulk, the Bahmani minister, was assassinated at the Bedar court. On hearing of his father's assassination Malik Ahmad, who was besieging Rajapur in Janjira, returned to Junnar, assumed the title of Ahmad Nizam-ul-Mulk Bhairi, and set himself to improve the state of the country. As Malik Ahmad, though he continued to read the public prayers in his master's name, had practically thrown off his allegiance, Mahmud Shah Bahmani II. (1482-1518) ordered Yusuf Adil Khan of Bijapur and Zain-ud-din of Chakan to attack him. But Yusuf, who soon after followed Malik Ahmad's example and assumed independence, instead of advancing against Malik Ahmad, withdrew his

troops from Indapur which was part of the Bijapur territory. Malik Ahmad, or as he was now styled Ahmad Nizam, appointed Zarif-ul-Mulk Afghan his commander-in-chief or Amir-ul-Omra, and Nasir-ul Mulk Gujarati, minister of finance or Mir Jumla. Ahmad tried but failed to win to his side Zain-ud-din the commandant of Chakan. As the Bahmani army was advancing against him, Ahmad left his family in Shivner and marched to meet the Bahmani force. During the night he suddenly turned on Ohakan, was himself the first to scale the walls, and had helped seventeen of his men to gain a footing before the garrison took alarm. Zain-ud-din and his men fought with great bravery, but their leader was killed and the rest surrendered. From Chakan Ahmad marched against and defeated the Bahmani army. He returned to Junnar and busied himself with improving the internal management of his territory. [Briggs', Ferishta, III, 190-195.] On the 28th of May 1490, at Bagh or the garden, now the site of Ahmadnagar, Ahmad gained a complete victory over the Bahmani forces. [Briggs' Ferishta, HI. 197.] After his return to Junnar, without a rival or an enemy, on the advice of Yusuf Adil Shah, Ahmad assumed the position of king, had the public prayers read in his own name, and had the white canopy of state borne over his head. But this assumption of kingly power was so distasteful to some of his leading supporters that Ahmad stopped the reading of prayers in his name, and allowed his nobles to use a canopy which differed from his own state canopy only in not being lined with scarlet. [Briggs' Ferishta, III. 198.] Shortly after, at the request of his officers, Ahmad again assumed the rank of king and had the prayers read in his name. [Briggs' Ferishta, III. 198. About the same time out of the runs of the Bahmani kingdom rose the Adil Shahi dynasty of Bijapur, the Kutb Shahi dynasty of Golkonda seven miles west of Haidarabad, and the Imad Shahi dynasty of Elichpur in East Berar.]

In 1493 Ahmad's sister, who was the wife of one of the Daulatabad family of Ashrafs, came to Junnar complaining of the murder of her son and of her husband by her husband's brother Malik Ashraf. Ahmad marched against Malik Ashraf, and, after besieging Daulatabad for two months without success, returned to Junnar. [Briggs' Ferishta, III. 200.] In 1494 Ahmad moved his capital from Junnar to Bagh, the site of his great victory over the Bahmani troops in 1490, where, about half-way between Junnar and Daulatabad, he had founded the new city of Ahmadnagar. [Briggs' Ferishta, III. 202. At Ahmadnagar the Nizam Shahi dynasty founded by Ahmad continued through ten successions to 1600, when Ahmadnagar was taken by Akbar the Moghal emperor. One more king afterwards reigned at Daulatabad, till 1630 when he was deposed and put to death. Two more infant kings

were nominated and in 1636 the kingdom was. destroyed by Shah Jahan, The names and dates of the Nizam Shahi kings are:

Nizam Shahi Kings, 1490-1636.

| NAME. | Date. | NAME. | Date. |
|--------------|-------|------------|-------------|
| Ahmad | 1490 | Burhin II. | 1590 |
| Burhan | 1508 | Ibrahim | 1594 |
| Husain | 1553 | Ahmad II. | 1593 |
| Murtaza I | 1565 | Bahadur | 1695 |
| Miran Husain | 1588 | Murtaza | 1605 - 1631 |
| Ismael | 1588 | | |

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Except perhaps Indapur, which belonged to Bijapur, the territory of Poona remained subject to the Ahmadnagar kings.

Under the Ahmadnagar kings, though perhaps less regularly than afterwards under the Moghals, the country was divided into districts or sarkars. The district was distributed among subdivisions which were generally known by Persian names, pargana, karyat, sammat, mahal, and taluka, and sometimes by the Hindu names of prant and desh. The hilly west, which was generally managed by Hindu officers, continued to be arranged by valleys with their Hindu names of Mora, murha, and maval. The collection of the revenue was generally entrusted to farmers, the farms sometimes including only one village. Where the revenue was not farmed, its collection was generally entrusted to Hindu officers. Over the revenue farmers was a Government agent or amil, who, besides collecting the revenue, managed the police and settled civil suits. Civil suits relating to land were generally referred to juries or panchayats. [Grant Duff's Marathas, 36, 38.] Though the chief power in the country was Muhammadan, large numbers of Hindus were employed in the service of the state. The garrisons of hill forts seem generally to have been Hindus, Marathas Kolis and Dhangars, a few places of special strength being reserved for Musalman commandants or killedars. Besides the hill forts some parts of the open country were left under loyal Maratha and Brahman officers with the title of estate holder or jagirdar, and of district head or deshmukh. Estates were generally granted on military tenure, the

value of the grant being in proportion to the number of troops which the grant-holder maintained. Family feuds or personal hate, and in the case of those whose lands lay near the borders of two kingdoms an intelligent regard for the chances of war, often divided Maratha families and led members of one family to take service under rival Musalman states. [Grant Duff's Marathas, 36, 38.] Hindus of distinguished service were rewarded with the Hindu titles of *raja*, *naik*, and *rav*. Numbers of Hindus were employed in the Ahmadnagar armies.

In 1529 Burhan Nizam (1508-1553), the second of the Ahmadnagar kings, was defeated by the troops of Bahadur Shah of Gujarat (1525-1535). This defeat led to an important change in the management of the Ahmadnagar state. Burhan, who had retired to Junnar, believed that his failure was due to the unpopularity of his minister or peshwa. The Persian title of Peshwa was brought into use in the Deccan in 1397 by Ghaias-ud-din. Bahmani (1397). It was adopted from the Bahmanis by the Ahmadnagar kings, and from the Ahmadnagar kings by Shivaji, Briggs' Ferishta, II. 353. Shaikh Jafar was deprived of his office, and it was given to a Brahman whom Ferishta calls Kavar Sen. [Briggs' Ferishta, II. 353.] From the time of Kavar Sen's appointment to be minister, Hindus gained great influence in the Ahmadnagar government. [Grant Duffs Marathas, 34 and foot.] Under the Ahmadnagar kings few references to places within Poona limits have been traced, though in ordinary times both Sinhgad and Purandhar in South Poona were in their hands. [Khafi Khan in Elliot and Dowson, VII. 272. In 1562 Husain Nizam Shah the third king of Ahmadnagar (1553-1565), pursued by Ram Raja of Vijayanagar and Ali Adil Shah of Bijapur, retired to the Junnar hills, and, employing his own troops to lay waste the districts of Junnar and Purandhar, prevented the enemy's advance. [Lassen, IV. 214. Of the Ahmadnagar generals at this time one was an Abyssinian, one a Deccan Musalman, and one a Koli. Ditto.] In 1564, on the accession of Murtaza Nizam Shah, one of his brothers Burhan Nizam with his sons, was placed in confinement on Lohogad hill about eight miles south-east of Khandala, and a second brother, Shah Kasim, was confined on Shivner near Junnar. In 1576, hearing that his brother was hated at Ahmadnagar, Burhan won over the commandant of Lohogad, and advanced from Lohogad to Ahmadnagar at the head of 6000 horse, but was not successful. [Briggs' Ferishta, III. 271, 282.] Burhan's two sons Ibrahim and Ismael continued in Lohogad till 1588 when they were carried to Ahmadnagar and Ismael was placed on the throne.

Between 1564 and 1589 Salabat Khan, the leading man at Ahmadnagar, according to Ferishta, made the country more prosperous than it had been since Mahmud Bahmani's time (1378-1397). In 1589 court factions forced him to retire to Burhanpur, and from Burhanpur he went to Talegaon, twenty miles north-east of Poona, and died there before the close of the year. [Briggs' Ferishta, III. 262,279.] In 1594 Bahadur the infant son of Burhan Nizam II. was kept in confinement for over a year at Chavand, and was then raised to the Ahmadnagar throne. [Briggs' Ferishta, III. 293, 296, 304.]

Maloji's Jagir.

The rise of the Marathas may be traced to the Moghal attack on Ahmadnagar in 1595. In 1595 king Bahadur Nizam II. (1595-1605) ennobled a Maratha, named Maloji Bhonsla, with the title of raja, and enriched him with the estates or *jagirs* of Poona and Supa, and the charge of the forts and districts of Shivner and Chakan. The headquarters of this Maloji Bhonsla, who is said to have held several patilships, were at Verul or Ellora near Aurangabad. Maloji's father Babji Bhonsla was descended from Bhosaji, who is said to have been the first of the family to settle in the Deccan. Bhosaji claimed descent from a younger or from an illegitimate son of the royal family of Udepur in Rajputana. [Grant Duff's Marathas, 41; Scott's Deccan, II. 4; Shivaji's Bakhar by Malharray Ram Chitnis (1811). Maloji married Dipabai the sister of Jagpalrav Naik Nimbalkar the deshmukh of Phaltan. The story told of his rise to power in the Ahmadnagar court is, that, in 1599, at the time of the *Holi* festival in March-April, Maloji took his son Shahaji, a boy of five, to pay his respects to Lukhji Jadhavrav, Maloji's patron and the chief Maratha in the Ahmadnagar state. Lukhji Jadhavrav, pleased with the boy seated Shahaji near Jiji his daughter a child of three or four. The children began to play, and Lukhji joking said to the girl, How would you like him for a husband? The guests laughed, but Maloji rose and solemnly accepted Lukhji's offer of marriage. Lukhji and his wife were furious, but Maloji stuck to his point and carried it, when, in 1599, his successful services were rewarded with the title of raja. [Grant Duff's Marathas, 41.] In 1600 the city of Ahmadnagar was taken by the Moghals. Partly from the disorders caused by the rebellion of Jahangir's son Khusru, which followed Jahangir's accession on the death of Akbar in 1605, Moghal power in the Deccan declined. Their generals in Ahmadnagar had also to deal with the Abyssinian slave Malik Ambar, a man of the highest talent both in military and in civil affairs. Though the Moghals still held Ahmadnagar in 1605, Malik Ambar raised Murtaza Nizam II. to the throne, and succeeded in recovering Junnar and making it the head-

quarters of a state which included the greater part of the former possessions of Ahmadnagar. From Junnar, he moved in the same year to Kharki near Ellora, a place which was afterwards named Aurangabad by Prince Aurangzeb. Malik Ambar's power remained unshaken till his death in 1633 when he was succeeded by his son Fateh Khan. Great as was his success as a general, Malik Ambar is best known by his excellent land system. He stopped revenue-farming, and, under Musalman supervision, entrusted the collection of the revenues to Brahman agents. He renewed the broken village system, and, when several years of experiments had enabled him to ascertain the average yield of a field, took about two-fifths of the outturn in kind, and afterwards (1614) commuted the grain payment to a cash payment representing about one-third of the yield. Unlike Todar Mal, Akbar's famous minister by whom the lands of North India were settled, Malik Ambar did not make his settlement permanent, but allowed the demand to vary in accordance with the harvest. This system was so successful that, in spite of his heavy war charges, his finances prospered and his country throve and grew rich. [Grant Duff's Marathas, 43.1

In May 1627, in Shivner fortnear Junnar, Jijibai Shahaji's wife gave birth to Shivaji, the founder of the Maratha empire. [Grant Duff's Marathas, 55.1 In 1629 the rains failed and a second failure in 1630 caused grievous suffering, Thousands left the Deccan and numbers perished in their homes; whole districts were emptied of people. The famine was accompanied by an almost complete loss of cattle and was followed by a pestilence. [Elphinstone's History, 507; Badshah Nama in Elliot and Dowson, VII. 24-25.] In 1629 Shahaji, who had succeeded his father Maloji in Poona and Supa, broke his connection with the Nizam Shahi government. He retired to Poona and Chakan, offered his services to the Moghal emperor, was confirmed in his lands, and received the command of 5000 horse, a dress of honour, and £20,000 (Rs. 2 lakhs) in cash. [Badshah Nama in Elliot and Dowson, VII. 15. The details of Shahaji's comma or masnab vary from 5000 to 15,000 horse. Ditto and footnote. In 1632, in spite of these and other gifts, Shahaji left the Moghal service and sided with Bijapur against the Moghals. At this time Shivaji and his mother had several narrow escapes of being caught by the Moghals. On one occasion Jijibai was taken prisoner, but was released and conveyed to the fort of Kondhana or Sinhgad. [Grant Duff's Marathas, 58.] In 1631 Murtaza Nizam II. was thrown into prison and strangled by order of Fateh Khan the son of Malik Ambar, and the infant son of Murtaza was raised to the throne. In 1634 Shah Jahan captured Daulatabad and took prisoner the young Nizam Shahi prince. The Moghals supposed that with the fall

of Daulatabad and the capture of the prince the war with Ahmadnagar was at an end. But Shahaji who had the support of Bijapur, proclaimed another prince heir to the Nizam Shahi kingdom, and, with the help of the local Brahman officers, succeeded in overrunning a great part of the southern Ahmadnagar territories and seizing most of the places of strength. At Gangapur on the Indrayani he weighed himself against money and changed the name of the town to Tulapur, the Weighing Town. In 1635 a Moghal army of 20,000 horse took the field against Shahaji, and he was forced to retire into Bijapur territory to the south of the Nira. According to Maratha tradition the town of Poona was destroyed by the Moghals and an ass-drawn plough drawn over the site. [Shivaji's Bakhar by Malharray Ram Chitnis (1811).] In 1636 Muhammad of Bijapur sued for peace and concluded a treaty with the Moghals, under which the Ahmadnagar territory was divided between Bijapur and the Moghals, Bijapur securing the country between the Bhima and the Nira as far north as Chakan. Grant Duffs Marathas, 52.] In 1637, as Shahaji declined to enter Bijapur service and refused to give Junnar and other fortresses to the Moghals, Muhammad of Bijapur helped Randaula Khan to overcome Shahaji. They blockaded Junnar and pursued Shahaji from Lohogad to Sinhgad, and from Sinhgad to the Konkan, where Shahaji agreed to enter Bijapur service and give up the forts of Junnar, Jivdhan, Chavand, Harshira, and Kondhana or Sinhgad.

Adil Shahis and Moghals, 1656-1686.

Of these Sinhand seems to have passed to Bijapur and the rest to the Moghals. [Badshah Nama in Elliot and Dowson, VII. 589; Grant Duff's Marathas, 53.1 Muhammad Ali treated Shahaji with honour, confirmed him in his estates in Poona and Supa, and, with the Bijapur minister Murarpant, employed him in settling the newly gained territory between the Nira and the Bhima. [Grant Duff's Marthas, 54, 65.] So strong a friendship sprang up between Murarpant and Shahaji, that, in the same year, when the settlement was completed, they led a joint expedition into the Karnatak, where the districts of Kolhar, Bangalur, Oskotha, Balapur, and Sera were afterwards made over to Shahaji. When Shahaji started with Murarpant for the Karnatak, he arranged that Shivaji and his mother Jijibai should live in Poona, and that his estates in Poona, which, in addition to Poona and Supa now included Indapur and Baramati in the east and the Mavals in the west, should be managed by a Brahman named Dadaji Kondadev. Dadaji managed Shahaji's estates with great success, continuing the system introduced by Malik Ambar. He was particularly successful in the Mavals or hilly west, where the people had fallen into great misery. He remitted

rents, found employment for the people as guards and messengers, and extirpated the wolves that infested the country. [East India Papers, IV. 420.]

North or Moghal Poona was also about this time (1636) improved by the introduction of Raja Todar Mal's revenue system, which consisted in ascertaining by experiments lasting through a long series of years the outturn of the land, fixing a share of the grain as the government share, commuting the grain share into a money payment estimated at one-fourth of the produce, and enforcing this one-fourth as a permanent rent. From the silver coin in which it was collected this settlement was known as the tankha. After twenty years of labour it was introduced into the Deccan by an able officer named Mnrshed Kuli Khan. [Grant Duff's Marathas, 57.] Murshed's system differed from Malik Ambar's, chiefly in being a permanent settlement while Malik Ambar's varied from year to year. [Grant Duff's Marathas, 66, 67; and Elphinstone's History of India, 514. Before the introduction of the silver tankha a copper tankha was in general use. Another change about this time (1637) introduced in the Moghal parts of Poona was the introduction of the *Fasli* year. The *Fasli* year which was started by Akbar (1556-1605) was a solar year, whose era or initial date was the Hijra. The *Fasli* year began from the *mrig* or opening of the south-west monsoon early in June. [Grant Duff's Marathas, 56.] As no attempt was made to reconcile the Fasli or solar Musalman year with the lunar, the Fasli differed from the regular lunar Musalman year more than three years every century.

Shivaji's Rise, 1643-1680.

At Poona Dadaji built for Jijibai and her son Shivaji a large Mansion called Rang Mahal. He taught Shivaji, as a Maratha chief Ought, to be a good archer, shot, spearsman, and rider, and, as a Maratha ought, to be ignorant of all clerkship even of the mystery of writing his own name. He taught him the rules of his caste and raised in him a love for old Hindu religious and warlike stories. From about his sixteenth year (1643) Shivaji took great delight in the stirring fellowship of freebooters, and, in their society, stayed away from his home for days, nursing the hope of one day becoming independent. His kindly obliging temper made him popular with the Maratha gentry round Poona, and he was probably none the worse liked when reports got abroad, that, young as he was, he had a share in some large gang robberies in the Konkan. To wean him from these dangerous pursuits, Dadaji entrusted Shivaji with the management of his father's estates.

His favourite pastime was hunting in the western hills with his friends the Mavalis, to whom his skill and success as a hunter endeared him. He gained a thorough knowledge of those wild districts. He learned how easily, under the present careless management, the hill forts might be seized, and, if once seized how easily they might be held against all comers The hill forts were easy to seize, because as the country round them was generally unhealthy, the Musalman garrisons were often withdrawn and the forts left in charge of an amildar or other local agent. Besides this, the Bijapur government was at peace with the Moghals, and the bulk of the regular Bijapur troops had been sent to the Karnatak. Of these years of Shivaji's life, Khafi Khan the Musalman historian gives the following account. Shivaji became manager of the two estates of Poona and Supa, which at this time belonged to his father Shahaji. He looked carefully after his father's affairs. He was distinguished in his tribe for courage and intelligence. In that country where all the hills rise to the sky and the forests are full of trees and bushes, he had an inaccessible abode. Like other local chiefs, he set about building forts on the hills and in the plains mud forts called gadhis. Muntakbu-I-lubab in Elliot and Dowson, VII. 256-57.] In 1646, when he was nineteen years old, Shivaji took the hill fort of Torna in Bhor territory about twenty miles south-west of Poona, and in 1647 he took the small inaccessible peak of Rajgad about three miles south-east of Torna and began to strengthen it with the view of making it his headquarters. Shahaji wrote and blamed Shivaji for this lawless conduct, and Dadaji did all that advice could do to turn him from his purpose, but Shivaji, though he made many promises, continued unmoved. Soon after Dadaji fell ill. On his deathbed (1647)he sent for Shivaji, advised him to press onhisplans of independence, to protect Brahmans cattle and cultivators, to guard Hindu temples, and to follow the fortune which lay before him. Grant Duffs Marathas, 60; Wilks' South of India, I. 72-74. On Dadaii's death Shivaji took complete charge of his father's estates. Soon after a messenger came from his father asking for the payment of arrears. Shivaji evaded payment, and at last told his father that the expense of managing his Deccan estates had become so great that in future he had better trust to his Karnatak revenues. Before his authority could be supreme in his father's estates, Shivaji had either to win over or to overpower two officers, Phirangaji Narsala who was in charge of Chakan and Baji Mohita the manager of Supa. Phirangaji he won over without much trouble. But, as Baji refused to listen to any proposals, Supa was surprised, he was made prisoner, and sent to Shahaji in the Karnatak Shivaji's next acquisition was Kondhana hill. This he gained

by a large bribe to the Musalman commandant, took possession of it, and named it Sinhgad or the Lion's Den.

In 1647, about the time of Dadaji's death, the commandant of Purandkar died. As the families were friendly, Shivaji was asked to settle some points in dispute among the commandant's three sons. He went to the fort, persuaded the younger brothers at night to make their elder brother prisoner, and during' the disturbance secretly filled the fort with his own Mavalis, and took it for himself keeping the brothers well disposed to him by the grant of lands and villages. Thus Shivaji without bloodshed secured the territory between Chakan and the Nira, It is *jagir* land, and Shahaji the holder of the land is in my power; if Shahaji does not object to let his son take his lands, what matters it to me. Thus perhaps Muhammad Adil Shah reasoned and devoted his thoughts to his two chief interests, his Karnatak conquests and his Bijapur buildings. [Grant Duff's Marathas, 61.]

Meanwhile Shivaji busied himself in gathering Mavalis and horsemen. His next exploit, his first open breach of peace with Bijapur, was in 1648, when he was twenty-one years old, the plunder of a rich caravan bringing treasure from Kalyan to Bijapur. The spoil was carried to Rajgad which was now Shivaji's head-quarters. This success was followed by the capture of Bhurap and Kangori in Kolaba, of Tung and Tikonain Bhor, of Koari in south-west Poona, and of Lohogad about six miles to the south-east and Rajmachi about ten miles to the north-west of Khandala. In the same year the Kolaba forts of Tala, Ghosala, and Rairi the modern Raygad were taken and Birvadi and Lingana were built. In Thana, Kalyan and all the forts in the neighbourhood were taken and several rich towns were plundered. In 1649, when for Shivaji's ravages Shahaji was imprisoned by Muhammad Adil Shah of Bijapur, Shivaji entered into a correspondence with the Moghal emperor Shah Jahan who agreed to admit Shivaji into the imperial service and to give him the rank of commandant of 5000 horse. Shahaji was released and Shivaji contrived to evade his promises by preferring certain claims on the revenues of Junnar and Ahmadnagar. In 1653, after an unsuccessful attempt on the part of Bijapur to seize him, Shivaji began to devise schemes for possessing himself of the whole of the Ghatmatha or hilly west Deccan and of the Konkan. In 1655 he caused the Hindu Raja of Javli in Satara to be murdered, took Eohira his fort, and built Pratapgad. Shivaji's principal minister at this time was Shamrajpant whom he now dignified with the title of peshwa and also gave him a high military command.

In the north of the Poona district, since 1636 Moghal power had remained unchallenged. In 1650 Prince Aurangzeb was appointed viceroy. He made Aurangabad his head-quarters and managed his charge with vigour and success. About 1657 Aurangzeb, who was planning the overthrow of his elder brother Dara Shekkoh, sent to ask Shivaji if he would enter his service. Shivaji pretended to be horrorstruck at the proposed rebellion, treated the messenger with indignity, and ordered, the letter to be tied to the tail of a dog. At the time Aurangzeb took no notice of this insult but it apparently lay at the root of his unceasing hatred of Shivaji. [Deccan, II. 7; Waring's Marathas, 63; Grant Duff's Marathas, 73.1 At this time, apparently stirred by Sivaji's success against Bijapur, the Kolis of north-west Poona rose in rebellion. Kheni, the Sar Naik and many leading Koli chifs agreed to try and shake off Musalman rule, and transfer their allegiance to some Hindu prince, probably Shivaji. A Moghal army was sent into the bills, the hill forts were strengthened and garrisoned, the people were hunted down and eithermade prisoners or slaughtered the Sar Naik and his clan were destroyed, and the prisoners war taken to Junnar and their heads cut off and piled into a pyramid and platform built over them which is still known as the Black Platform or Kala Chabutra. [Captain Mackintosh, Jour. Bom, Geog, Soc. I, 241-42.]

In 1657, with no further reason than that the state was weakened by the death of king Muhammad Adil Shah and that his successor Ali Adil Shah was a child, Aurangzeb declared war against Bijapur Shivaji took advantage of this war to increase his resources by plunder. In May 1657 he committed his first act of hostility against the Moghals. In a night attack he surprised and plundered Junnar, and carried off about £ 1100 (3 lakhs of pagodas) in cash, 200 horses, valuable cloth, and other articles. He escorted his booty as far as Poona, and then handed it to a party to be taken to Raigad. From Poona Shiyaji marched by unfrequented roads and surprised and partially plundered Ahmadnagar. He made great efforts to strengthen his cavalry. He bought horses from all quarters, engaged horsemen whom he could trust, began to employ Maratha shiledars or self-mounted troopers, and appointed a new master of horse, Netaji Palkar, a man of vigour and influence but cruel and unprincipled. The rapid success of Aurangzeb's advance on Bijapur marred Shivaji's plans. He sent one messenger after another praying for forgiveness, promising amendment, and offering to help Aurangzeb with a body of horse. Aurangzeb, who was suddenly called to Delhi by the news of his father's severe illness, agreed to pardon Shivaji, to enquire into his

hereditary claims, and to receive a body of 500 of his horse. In 1659 Shivaji sent a large force under Shamrajpant Peshwa against the Sidi of Janjira in the Central Konkan, but the Sidi defeated the Peahwa's array with great slaughter. Shamrajpant was recalled and Moro Trimal Pingle was named Peshwa in his place. A treaty was made with the Savants of Vadi in the South Konkan, under which Shivaji obtained one-half of the revenue of that state. In the same year, near Pratapgad Shivaji assassinated Afzul Khan the Bijapur general, who was sent to reduce him, and destroyed his army. Soon after this Panhala and Pavangad in Kolhapur fell to his officers, and Vasantgad in Satara was taken by Shivaji himself who levied contributions along the banks of the Krishna, and left a thana or garrison with a revenue collector in the mud fort of Battis Shirala. On Shivaji's arrival at Panhala the forts in the neighbourhood, both below and above the Sahyadris submitted, and Rangna and Vishalgad were taken by surprise. In the next month (December 1659) Shivaji plundered as far as Bijapur, levied contributions from market towns, and spread terror over the whole country. In 1660 Shivaji was engaged with the Bijapur troops, who retook the forts near Panhala except Rangna and Vishalgad. In January 1661 Shivaji took and plundered Rajapur in Ratnagiri and attacked the possessions of a local Maratha chief, the Dalvi of Shringarpur. During the rains he built a temple to the goddess Bhavani in the fort of Pratapgad, and from this time his religious observances became extremely strict. He chose the celebrated Ramdas Svami as his spiritual guide, and aspired to a high character for sanctity. He is even said to have offered all his territories to Ramdas Svami. The Svami had no need of lands but asked Shivaji to use the colour of his clothes in the Bhagva Jhenda or Saffron Banner. In the same year 1661 he made a rapid march across the country, and to avenge his father's wrongs, who, at the instance of the Bijapur government had been treacherously seized by Baji Ghorpade of Mudhol in 1649, surprised and killed Ghorpade with most of his relations and followers, and plundered and burnt Mudhol. The Savants of Vadi, who contrary to their engagements had taken an active part against him, Shivaji attacked and pursued, and afterwards received as vassals. Shivaji next built the forts of Rairi and Sindhudurg or Malvan, both on the Ratnagiri coast, and fitted out a navy. He strengthened Kolaba and Vijayadurg in Ratnagiri, and prepared vessels at all these places, Kolaba being his chief naval centre. On condition of being supplied with guns and warlike stores Shivaji did no harm to the Portuguese Shivaji's power was now so great that the Bijapur minister entered into a secret compact with him, which was probably brought about by the intervention of his father Shahaji, who at this time visited Shivaji with the approval of the Bijapur government. Shivaji treated

his father with the greatest distinction. On hearing of his approach he went several miles to meet him, dismounted, and saluted him with the obeisance due by a servant to his sovereign. He insisted on walking by the side of his father's palanguin, and would not sit in his father's presence until repeatedly commanded. After some weeks spent in pleasure and in visiting the temple at Jejuri and other places in Shivaji's territory, Shahaji, highly gratified, returned to Bijapur, the bearer of presents from Shivaji to the king. From this time until Shahaji's death in 1664 Shivaji never attacked Bijapur, nor, when hostilities were renewed, was Shivaji the aggressor. Soon after Shahaji's death, Shivaji changed his capital from Rajgad to the inland Rairi in the Central Konkan, which he greatly strengthened and called Raygad. Shivaji now held the whole Konkan from Kalyan to Goa, and the Konkan Ghatmatha or hilly west Deccan from the Bhima to the Varna. His army of 50,000 foot and 7000 horse was much larger than his territory, which at its greatest breadth from Supa to Janjira did not exceed 100 miles, either required or could support. His power was formidable and the truce with Bijapur gave him the opportunity of turning it against the Moghals. In 1662, as Aurangzeb was longer and more busily employed in Northern India than was expected, Moro Trimal Pingle, Shivaji's minister or peshwa possessed himself of several strongholds north of Junnar. In the same year Netaji Palkar, Shivaji's master of the horse, who had swept the Moghal territory close to Aurangabad, returned safe to Poona. To punish this daring raid, Shaiste Khan, the new Moghal governor, marched from Aurangabad with a great force towards Poona and Chakan. Shivaji, who was in Supa, retired to Sinhgad; Supa was taken, and, in spite of much annoyance from Shivaji's horse, the Musalmans pressed on and took Poona. [Elliot and Dowson, VII, 261-263.] From Poona Shaiste Khan marched north to Chakan. The fort was held by Shivaji's old ally Phiraugaji Narsala, and, in spice of a most skilful and vigorous attack, was defended with such courage that it did not fall till two months had. passed and 900 of the besiegers were slain. When Phirangaji surrendered the Moghal general treated him with great respect and sent him in safety to Shivaji by whom he was praised and rewarded. Shaiste Khan placed Uzbek Khan in charge of Chakan, called Jafar Khan from Malwa to his aid, and marched after Shivaji. [Muntakhabu-I-Lubab in Elliot and Dowson, VII. 262 - 263. In 1663, under Aurangzeb's orders, Raja Jasvantsing the Rajput prince of Jodhpur arrived with a large reinforcement. The fair season was far advanced and the whole army lay idle near Poona. Shaiste Khan, after taking several forts and strong places had gone to Poona and was living in the Rang Mahal which Dadaji Kondndev had built for Shivaji and his mother. In spite of the precautions which had been taken to prevent

armed Marathas entering Poona Shivaji determined to surprise the Moghals. He sent two Brahmans in advance to make preparations. One evening in April a little before sunset Shivaji set out from Sinhqad with a considerable body of foot soldiers. These he posted in small parties along the road, and took with him to Poona only YasajiKank, Tanaji Malusre, and twenty-five Mavalis. [According to Khafi Khan, Shivaji, beaten and dispirited, had retired into mountains difficult of access, and was continually changing his position. Elliot and Dowson, VII. 269. See Waring'a Marathas, 74. 75. The Brahmans had won over some of the Marathas in Shaiste Khan's employ. They arranged that two parties of Marathas should enter the town one as if a wedding party the other as if bringing prisoners, and that Shivaji and his twenty-five should past in with them. Shivaji's party passed in safety, put on the armour, and, at the dead of night, by secret ways reached the Khan's house. They entered through the cookhouse, killed the cooks, and, as they were cutting through a built-up window, the alarm was raised. Three of the Mavalis forced themselves into Shaiste Khan's room, but two fell into a cistern of water and the third, though he cut off Shaiste Khan's thumb, was killed by his spear. Two slave girls dragged Shaiste Khan to a place of safety. This is Khaif Khan's account in Elliot and Dowson, VII 270-1. According to Grant Duff (Marathas, 88) Shaiste Khan's fingers were cut off as he was letting himself out of a window.] The Marathas killed many of his followers, cut to pieces some of the women, and cut off the head of an old man whom they took for Shaiste Khan. The kettle-drums beat an alarm and the Marathas retired, lighting torches and burning bonfires as they went up Sinhgad hill in derision of the Moghals. [Khaif Khan in Elliot and Dowson, VII, 270-271.] Next morning a body of Moghal horse gallopped towards the fort. They were thrown into confusion by an unexpected fire of musketry and retired in disorder. A party of Shivaji's horse fell on them and they took to flight, the first time that Moghal cavalry had been chased by Marathas. The surprise in Poona and other small reverses filled Shaiste Khan with the suspicion that Jasvantsing was in league with Shivaji. The dissensions of their leaders crippled the Moghal army, and both Shaiste Khan and Jasvantsing were recalled. Jasvantsing was afterwards allowed to remain as second in command to Prince Sultan Muazzam who was appointed viceroy. Jasvantsing made a feeble attempt to invest Sinhgad, but did not press the siege. Strong detachments were left at Chakan and Junnar and the main body of the army retired to Aurangabad. About this time Shivaji went to Poona to hear a *katha* or song-sermon by the Vani saint Tukaram and narrowly escaped being made prisoner by the garrison of Chakan. [Grant Duffs Marathas, 89. According to the Marathas Shivaji escaped by the help of the god Vithoba of Pandharpur. In 1664, after his

return from sacking Surat, Shivaji heard of the death of his father Shahaji. [Shahaji had continued faithful to Bijapur and had been allowed to keep his estates in the Karnatak and the fort of Arni, Porto Novo, and the territory of Tanjor. Grant Duff's Marathas, 89 - 90.1 He came to Sinhaad and spent some days in performing his father's funeral rites. He then took the title of Raja, struck coins in his name, and spent some months at Raygad hill in Kolaba arranging his government. His fleet scoured the coast and enraged the Musalmans by seizing some holy Mecca pilgrims. In August Shivaji surprised and plundered the town of Ahmadnagar and swept across the country east to Aurangabad. In October the Bijapur troops broke the truce and made a vigorous effort to regain the Konkan. Shivaji seemed to be everywhere and ready at all points. He met the Bijapur army and defeated them with great loss. He burnt Vengurla in Ratnagiri, and hastened to Sinhaad to watch the Moghals who had sent a strong reinforcement to a camp at Junnar. Finding the Moghals did not intend to act on the offensive, he returned to the coast, embarked from Malvan with 4000 men, plundered the rich town of Barcelor about 130 miles south of Goa, sailed back to Gokarn in North Kanara, scoured the country, re-embarked, and returned to his capital.

In February 1665, Jasvantsing and Sultan Muazzam were recalled, and Mirza Raja Jaysing another Rajput prince and Diler Khan were sent to conduct the war against Shivaji. They reached the Deccan early in April 1665 and lost no time in beginning operations. Jaysing went to Poona, arranged its affairs, and spread abroad his forces ravaging the country and attacking Shivaji's forts. He himself went to attack Purandhar, about twenty miles south-east of Poona, one of the most noted fortresses in the Deccan. Diler Khan, who was sent in command of the advanced force, began the siege and invested both Purandhar and the neighbouring fort of Vajragad or Rudra Mahal. Jaysing left Diler Khan to prosecute the siege of Purandhar and blockaded Sinhgad. [Grant Duffs Marathas, 92; and Elliot and Dowson, VII. 272.] The commandant of Purandhar was Baji Prabhu, the deshpandia of Mahad in Kolaba, and the fort was strongly garrisoned by Mavalis and Hetkaris that is Ratnagiri Marathas. The deshpandia maintained his post with bravery and ability. He disputed every point of the approaches, but his out-posts were driven in, and Diler Khan began to mine a rock under one of the towers of the lower fort. The garrison made frequent sallies, and repeatedly drove off the miners, but they were at last firmly lodged under cover. After numerous failures they succeeded in shattering the rock so as to enable them to attempt an assault. The assailants gained the lower fort, and, while the garrison was retiring to the upper fort, began to plunder careless or ignorant of

their danger. The Hetkari marksmen from above opened so destructive a fire that many of the assailants sought shelter in every corner and others ran outside for cover. The Mavalis headed by their commander sallied out, attacked the Moghals sword in hand, killed all that opposed them, and drove them down the hill. Diler Khan, who was seated on his elephant near the hill foot, seeing the flight of his men, bent his bow, called on a body of Pathans about him to advance, and rallying the fugitives pushed his elephant forward. The garrison, like all Marathas daring in success, closed with his men and the powerful Afghans recoiled from the swords of the Mavalis. Diler Khan, marking the conspicuous conduct of their leader, with his own hand pierced him with an arrow, and killed him on the spot. On the loss of their leader the garrison fled nor stopped until they reached the upper fort. The Moghals again took possession of the lower fort, but the fire from above once more forced them to leave it. After this failure Diler Khan, considering the northern face impregnable, determined on attempting to escalade the small detached fort of Vajragad or Rudra Mahal, on the north-east corner of Purandhar which commands a great part of the main works. The attempt succeeded and guns were brought to breach the upper fort. The setting in of the rains greatly retarded operations. The Moghal artillery was bad, and, although they continued firing for weeks, they made little impression on the defences. The garrison became dispirited and sent notice that they could hold out no longer. They would have left the fort, but Shivaji, who, after his successes at sea, had at last returned to Raygad, asked them to hold on until he should send them word to retire. [Khafi Khan's account (Muntakhbu-l-Lubab in Elliot and Dowson, VII. 272), while in the main agreeing with the Maratha version, gives some interesting additional details. The garrison of Purandhar made a vigorous defence and Jaysing arrived with his son Kesarising. After a bastion had been blown up on one side a panic seize the defenders of the foot of the hill. The besiegers attacked them and succeeded in making their way to the top of the hill when the defenders called for quarter which was granted them by the Raja and Diler Khan. The two commandants waited upon Diler Khan, and were sent to the Raja who disarmed the garrison and took possession of the forts. Eighty men, horsemen, infantry, and sappers were lost in the siege and more than a hundred were wounded. After the conquest of the two forts Raja Jaysing sent Daud Khan with 7000 horse to plunder and lay waste the country which Shivaji had won by force and violence. Great efforts were made on both sides, and for five months the imperial forces never rested from harassing and fighting the enemy. At Shivapar which was built by Shivaji and at the forts of Kondhana or Sinhgad eight miles south of Poona, and Kanvari (Koari) not one trace of cultivation was left, and numbers of cattle were taken.

On the other hand, the Marathas' sudden attacks, their brilliant successes, their night assaults, their seizure of the roads and passes, and the firing of the forest, severely tried the imperial forces, and men and beasts perished in numbers. The Marathas had also suffered heavy losses and no longer had heart to face the imperial troops. The fort of Raigad about three miles south-east of Torna and about fifteen south-west of Poona, which Shivaji himself held and the fort of Kondhana or Sinhgad in which were his wife and his mother's relations were both invested and hard pressed. The roads on all sides were blockaded and Shivaji knew that he could not rescue his family and that if Sinhgad was taken they would be liable to suffer the consequences of his evil deeds. Accordingly he sent some intelligent men to Raja Jaysing, begging forgiveness, promising the surrender of several forts which he still held, and proposing to visit the Raja. The Raja doubting his sincerity, ordered that the attack should be pressed with renewed vigour. At last two confidential Brahmans came from Shivaji and with the most binding oaths confirmed his expressions of submission and repentance. The Raja promised him security of life and honour on condition that he waited on the emperor and agreed to enter his service. He also promised him high station or mansab in the imperial service and made preparation for receiving him as became his rank. Shivaji approached with great humility. The Raja sent his agent or munshi to meet him and he also sent armed Rajputs to guard against treachery. The *munshi* carried a message to say that if Shivaji submitted frankly, gave up his forts, and agreed to obey, the emperor would grant his petition for forgiveness. If he did not accept these terms he had better return and renew the war. When Shivaji received the message he said with great humility that he knew his life and honour were safe if he made his submission. The Raja then sent a person of high rank to bring him in with honour. When Shivaji entered the Raja rose, embraced him, and seated him near himself. Shivaji then with thousand signs of shame clasped his hand and said ' I have come as a guilty slave to seek forgiveness, and it is for you either to pardon or to kill me at your pleasure. I will make over my great forts with the country of the Konkan to the emperor's officers, and I will send my son to enter the imperial service. As for myself, I hope that after the interval of one year, when I have paid my respect to the emperor, I may be allowed, like other servants of the state who exercise authority in their own provinces, to live with my wife and family in a small fort or two. Whenever and wherever my services are required, I will, on receiving orders, discharge my duty loyally.' The Raja cheered him and sent him to Diler Khan. After the siege was stopped, 7000 persons, men women and children, came out of Sinhgad fort. All that they could not carry became the property, of the

government and the forces took possession of the fort. Diler Khan presented Shivaji with a sword. He took him back to the Raja who presented him with a robe, and renewed his assurances of safety and honourable treatment. Shivaji, with ready tact, bound on the sword in an instant, and promised to render faithful service. When the question about the time Shivaji was to remain under parole, and of his return home, came under consideration, Raja jaysing wrote to the emperor, asking forgiveness for Shivaji and the grant of a robe to him, and awaited instructions. A mace-bearer arrived with the *farman* and a robe, and Shivaji was overjoyed at receiving forgiveness and honour.] Shivaji sent Raghunathpant Shashtri to Jaysing, who agreed to Shivaji's proposal to enter the Moghal service and give up part of his territory.

Moghals. Shivaji, 1665.

At the same time Jaysing placed no trust in Shivaji's sincerity until the Brahman convinced him that Shivaji did not intend to deceive him. Jaysing then desired him to assure Shivaji on the honour of a Rajput that he might rely not only on the emperor's pardon but on his favour and protection. While this negotiation was pending, Shivaji, with a slender retinue, in the month of July, proceeded from Pratapgad in Satara to Jaysing's camp before Sinhgad, where he announced himself as Shivaji Raja. Jaysing sent his son Kiratsing to lead him to his presence with all the honours due to his rank. The whole, camp pressed forward to see this celebrated hero and on his approach Jaysing advanced from his tent, met, and embraced him. [Scott's Deccan, II. 11.] Jaysing seated Shivaji on his right hand, treated him with respect and kindness, and repeated the assurances sent by Ragunathpant. After some conversation in the humblest strain on the part of Shivaji, he was allowed to retire to tents near those of Jaysing Next day Shivaji went to visit Diler Khan, who was still before Purandhar and was exceedingly mortified that he was not made privy to the negotiation. He threatened to persevere in reducing Purandhar and putting every man to the sword. This was but a threat, and he was soothed and gratified by Shivaji's presenting the keys of the gate with his own hand, telling him that all his forts and country were his, that he merely sought pardon, that experience had satisfied him that it was folly to resist such soldier as Aurangzeb could boast of, and that now his one hope was to be enrolled among the servants of the empire. An armistice took place as soon as Shivaji came into camp. After several conferences, subject to the emperor's approval, it was agreed that Shivaji should give up whatever forts or territory he had taken from the Moghals. Of thirty-two forts taken or built by him in the

territory which had belonged to the Nizam Shahi government, he gave up twenty to Jaysing, among which were Purandhar and Sinhgad with all their dependent districts. According to Khafi Khan Shivaji gave twenty-three out of thirty-five forts with a yearly revenue amounting to £400,000 (10 lakhs of huns or 40 lakhs of rupees). [Elliot and Dowson, VII.275. The territory belonging to the remaining twelve forts, [The twelve forts were: Rajgad, Torna, Raygad, Lingana, Mahadagd, Balagad, Ghosala, Isvadi, Pali, Bhurap, Koari, and Udedurg.] of which Koari and Isvadi were in Poona, estimated to yield a yearly revenue of about £40,000 (Pagodas 100,000) and all the rest of his acquisitions, were to form his estate which he was to hold from the emperor, and his son Sambhaji then in his eighth year, was to receive the rank of a commander of 5000 horse. The most remarkable part of the agreement was Shivaji's proposal to be allowed assignments on Bijapur, estimated at about £180,000 (Pagodas 500,000), being a fourth and a tenth of the revenue, termed by him the chauth and sardeshmukhi, of certain districts above the Sahyadris, the charge of collecting which he took upon himself So eager was Shivaji to obtain the imperial authority for this arrangement, that it was granted on condition he offered to pay a tribute or peshkash of about £1,400,000 (Pagodas 4,000,000) by yearly instalments of about £110,000 (Pagodas 300,000), and to keep an additional body of troops. Shivaji's proposals, according to custom, were sent to the emperor in the form of a petition. On Jaysing's suggestion Shivaji intimated his desire to kiss the royal threshold. Aurangzeb agreed to Shivaji''s proposal on condition that he and his troops went with Raja Jaysing against Bijapur and that he paid the first instalment of the promised tribute. According to this agreements, Shivaji co-operated with Jaysing, and the combined army, including 2000 horse and 8000 infantry belonging to Shivaji, marched against Bijapur about the month of November. In the operation which followed, Phaltan was reduced, the fort of Tathavad escaladed, and all the fortified places on their route were taken possession of by Shivaji and his Mavalis. In consequence of these service Aurangzeb invited Shivaji to court, promised to confer on him great rank and honour, and to allow him to return to the Deccan. In 1666 Shivaji after visiting all his forts and holding a council of his ministers at Raygad, went to Delhi with his son Sambhaji. At Aurangzeb's court he was treated with indignity and was watched as a prisoner. In the Deccan Jaysing had not the means to garrison many of the forts surrendered by Shivaji. He placed strong garrisons in Lohogad, Sinhgad, and Purandhar; a few men were left in such of the others as had supplies of provisions; and of the rest, he ordered that the gates should be burnt, and such part of the defences destroyed as could be hastily thrown down. After Shivaji's escape from Delhi, in December 1666, he lost no time in regaining his forts. Moropant Peshwa repaired them, replaced the garrisons, and drove out the Moghals.

Moghals, Shivaji, 1667.

In 1667, by the representations of the new viceroy Sultan Muazam, who was accompanied and much swayed by Jasvantsing a staunch Hindu, Shivaji obtained from Aurangzeb the title of Raja, a confirmation of Sambhaji's rank, and land in Berar, The districts of Poona, Chakan, and Supa were also restored to Shivaji, but the commanding forts of Sinhaad and Purandhar were kept by the Moghals. Though Aurangzeb at first agreed to Sultan Muazzam's proposals in favour of Shivaji, he afterwards showed marked hostility to Shivaji. Accordingly Shivaji determined ns soon as possible to gain the strongly garrisoned forts of Sinhaad and Purandhar which blocked his communication with Poona and Chakan. Sinhgad, Shivaji justly considered one of the strongest forts in the country, and, as the commandant, Ude Ban, was a celebrated soldier and had a choice Rajput garrison it was supposed impregnable. Security had made the Sinhgad garrison somewhat negligent, and Shivaji laid a plan for taking the place by surprise. Tanaji Malusre, whom he consulted, offered to surprise Sinhgad if he was allowed to take his younger brother Suryaji and 1000 picked Mavalis. Accordingly, in February 1670, one thousand Mavalis under Tanaji and Suryaji started from Raygad in Kolaba, and, taking different paths, met near Sinhgad. Tanaji divided his men into two parties. One party under his brother Survaji he left at a little distance with orders to advance if necessary; the other party under his own command lodged themselves undiscovered at the foot of Sinhaad rock. When it grew dark, choosing the sheerest part of the rock as the least likely to be guarded, one of the Mavalis climbed the rock and made fast a ladder of ropes up which the rest crept one by one. Each as he gained the top lay down. In spite of their care before 300 of them had reached the top, some movement drew the attention of the garrison to the Mavalis. One of the garrison drew near and was silently slain by an arrow. Still the alarm spread, and the noise of voices and of a running to arms showed Tanaji that a rush forward was his only chance of a surprise. The Mavalis plied their arrows in the direction of the voices, till a blaze of blue lights and torches showed the Rajputs armed or arming, and discovered their assailants. In the desperate fight that followed Tanaji fell. The Mavalis lost heart and were running to the ladder, when Suryaji, Tanaji's brother, met them with the reserve. He rallied them, asked them if they would leave their leader's body to be tossed into a pit by Mhars,

told them the ropes were broken and there was no retreat; now was the time to prove themselves Shivaji's Mavalis. They turned with spirit, and, shouting their war cry *Har Har Mahadev*, dashed on the garrison, and, after a desperate fight in which 300 Mavalis and 500 Rajputs were slain or disabled, gained the fort. A thatched house turned into a bonfire flashed the news to Shivaji. Besides those who were slain or wounded in the fort, many Rajputs who ventured over the crest of the rock were dashed to pieces. Contrary to his custom, Shivaji gave every man of the assailants a silver bracelet and honoured their leaders with rich rewards. He grieved over Tanaji Sinhgad the lion's house is taken, but the lion is slain: I have gained a fort and lost Tanaji. Suryaji, Tanaji's brother, was made commandant of Sinhgad, and within a month (March 1670) again distinguished himself by escalading Purandhar. [Grant Duff's Marathas, 94.]

Moghals. Shivaji, 1670-1675.

Mahuli and Karnala in the Konkan were also taken, and the whole province of Kalyan was recovered by the end of June. In July (1670) Lohogad was surprised and taken, but an attempt on Shivner failed. [Grant Duff's Marathas, 109, 110. Next year (1671) Diler Khan, who was at Junnar with a considerable Moghal force, retook Lohogad and captured Chakan. [Grant Duffs Marathas, 110] In 1674, after great successes in South Gujarat, Khandesh, Golkonda, Satara, the Bombay Karnatak, and North Kanara, Shivaji was crowned with great pomp at Raygad in Kolaba. At the time of his crowning Shivaji is described as forty-seven years of age, of a handsome and intelligent countenance, and for a Maratha fair in skin. His eye was keen, his nose long aquiline and somewhat drooping, his beard trim and peaked, and his moustache slight. His expression was rapid and resolute, hard and feline. [Mr. Douglas from the Vignette in Orme's Historical Fragments. Scott Waring (Marathas, 87-88) gives the following details: Shivaji was short and dark with bright piercing eyes, an active body, and wellgoverned temper. He was religious above his countrymen. He was good father to a bad son. Though he possessed high talents as a soldier, he was fonder of cunning than courage and of dissimulation than wisdom.]

Junnar, 1673.

In 1675 Shivaji made another unsuccessful attempt on Shivner his birth-place, which was never destined to fall into his hands. [Grant Duff's Marathas, 119.] About this time the services of Fryer, the English physician and traveller, were sought by the Moghal governor of

Jeneah that is Junnar. Fryer started from Bombay on St. George's Day, 23rd April 1673, and passed through Kalyan and Murbad which was all wasted by Shivaji and the Moghals, up the terribly steep Avapa pass or Oppagaot. [Fryer's party included four Moor peons, a Portuguese, his own servants, a Brahman linguist, a horsekeeper, eight palanguinbearers, a dozen *farasis* that is lumber or baggage-carriers, and a Turkish horse, East India and Persia, 123. At the top of the pass was a bad starvling town which, he calls Oppagaot. There was a fort or castle on a hill top, and near the head of the pass a *subhedar* or customer, blown up with the confidence of half a dozen hillmen. From the top of the pass Fryer entered a deep valley where he met a caravan of oxen laden with provisions which had hardly escaped the Moghal army which was not far off. Fear of the villainy of Shivaji's men made Fryer's guide use great haste, and by ten at night he had travelled twenty miles (10 kos) to Ambegaon. In Ambegaon there was no one but a single fakir; the rest had fled from a party of Moghal horse. As they could get nothing to eat but a few green figs, Fryer's people pressed on through three or four wretched villages, to Beelseer or Bilsar three miles south-west of Junnar. Here his people rested as they found some provisions in a wretched hamlet which was liable to continual pillaging at the hands both of the Moghals and of the Marathas, and bore the pillaging well because it was in the condition of having little or nothing to lose. Next day, the last of April, he went on to Junnar the frontier town of the Moghals, for many years the seat of war. There was a castle at Junnar and some palaces with gardens, and the governor was in command of 17,000 horse and 3000 foot. The governor of the city and district was different from the commandant of Shivner fort who never left the hill top. Junnar city and the fort in the plain were ill-prepared to stand a siege. The Moghals were encamped there rather than settled, and, when Shivaji came in force, they retired speedily to the main army under Bahadur Khan who had a host of 40,000 horse at Pedgaon three days journey off in Ahmadnagar on the Bhima. Fryer, in English interests, tried to persuade the governor of the value of opening a trade with Bombay through which the Deccan might be supplied with Arab and Persian horses. To do this it was necessary that the Konkan should be cleared of Shivaii's troops. The governor made light of Shivaji, but seemed little inclined to drive him out of the Konkan, either because he knew it was more difficult to do than he pretended, or, because, if Shivaji was driven out, the excuse for keeping up a large army and therefore his employment and the source of his revenue would cease. Fryer explains why the governor was so disinclined to reduce his army. He kept only half the nominal muster of men and drew the pay of the rest, dividing his profits with the notaries who were sent by Aurangzeb to see that no frauds were

committed. The same practice was followed by the under-officers. Every one had their snips verifying the proverb, 'Half the king's cheese goes in parings.' The grandees of the army were mounted on Persian Arab or Turkish steeds; the lower officers rarely got more than the race of the country which were fiery and mettlesome, but very flashing probably because the officers pinched their horses' bellies to put into their own. There were many Hindus in the Moghal army and many Musalmans in Shivaji's army, as they thought not of their country but whose salt they ate. The Moghal army was chiefly Moghal cavalry and Gentoo infantry with matchlock muskets. Their pay was fourteen months behind hand. Still they stayed, for they were sure of something with ease, while Shivaji's rule was the freebooter's rule, No plunder no pay Fryer's East India and Persia, 139,141.] When the rains began to fall cotton was planted in the fields about Junnar. The land also yielded wheat in abundance and other grain, though the husbandmen's crops were often burned by those mountain-foxes the Marathas. It was not safe to move about Junnar in small parties: troopers were often sent home disrobed and dismounted. Except Shivner most of the hill forts were in Shivaji's hands. In a still night many of his garrisons might be heard by voice and more by trumpet. The government of Junnar was like the government of all Moghal cities. The walls were broken but the gates remained. Disorder had scared trade, though the town was well placed and furnished with coarse calicoes, fine lawns, and plenty of cotton land. The ploughmen and weavers had followed the traders. A rich craftsman or landholder was not to be heard of in seven or eight days' journey. The markets had little but provisions which the rulers compelled the country-people to bring in, and sometimes took them by force by reason of the general poverty reigning among them. Fryer returned to Bombay by the Nana pass, a far shorter and easier way than he came. Between Junnar and the head of the pass he went by three of Shivaji's castles. It was doubtful if the Moghals could pass by that way.

During the last four years of his life (1677-1680) the success of his famous expedition to the Madras Karnatak greatly increased Shivaji's power.

Moghals, Sambhaji. 1680-1689.

On Shivaji's death on the 5th of April 1680, Sambhaji his son and successor showed some of his father's vigour and skill in war. [At the time of his death, Shivaji held the Konkan from Gandevi in Surat to Phonda in Kolhapur, except the small possessions of the Portuguese, the English and the Sidi. He had posts in Kanara and great possessions

in the Madras Karnatak and in Tanjor. He held the West Deccan from the Hiranyakeshi in Belgaum to the Indrayani in Poona, besides strong points in Ahmadnagar, Nasik, and Khandesh In Raygad he had several millions of cash besides valuable goods.] He then fell into a life of pleasure and vice, wasting in dissipation the wealth which his father had amassed. Kalusha, his friend and councillor, raised the land rent by levying many fresh cesses. Still the receipts fell short of the former rental. The managers of districts were removed, the revenue was farmed, many landholders fled, and speedy ruin threatened Sambhaji's territories. [Grant Duff's Marathas, 141.]

In 1682 to rayage the Konkan a body of Moghal horse under Husan Ali Khan advanced from Ahmadnagar by the route of Junnar and descended the Sahyadris. In 1684, Aurangzeb issued orders to levy a poll tax or *jizia* on all non-Muhammadan subjects. [Grant Duff's Marathas, 145. In 1685. Aurangzeb ordered Khan Jahan to place posts or thanas in the country between Junuar and Sinhgad. Khan Jahan took Poona and the country round, and appointed Khakar Khan as, governor or foujdar. [Grant Duff's Marathas, 148.] In the same year (1685) a body of troops stationed under Ghazi-ud-Din at Junnar was directed to move towards Ahmadnagar. The Marathas sized this opportunity and made a rapid march northwards and plundered Broach, Aurangzeb's revel son Sultan Akbar, whom Sambhaji treated with the greatest respect, instigating if not leading the enterprise. He was intercepted near Chakan and defeated by the Moghal forces. [Scott's Deccan, II. 70.] In 1686 Bijapur fell and the Adil Shahi dynasty came to an end. In 1689 Aurangzeb's camp moved up the Bhima, from Akluj in Sholapur and cantoned at Tulapur at the meeting of the Indrayani and the Bhima, sixteen miles north-east of Poona. While Aurangzeb was camped at Tulapur, Takarrib Khan, who had surprised Sambhaji and his favourite Kalusha at Sangameshvar in Ratnagiri, arrived with his prisoners. The Marathas made no effort to rescue Sambhaji. Kalusha's oppression and Sambhaji's misconduct had made them hateful to the bulk of the people, and even had his army been disposed to undertake any enterprise in his favour, its loose and disordered state would probably have prevented the attempt. When the prisoners were brought close to the imperial camp they were bound and set upon camels. His turban was taken off Sambhaji's head, drums and other noisy music sounded before him and thousands flocked from all sides to see his entry into the camp. The prisoners were shown to Aurangzeb and ordered into confinement till their sentence was determined. Some of the Moghal nobles suggested that Sambhaji's life should be spared a a means of inducing his troops to surrender the forts; Aurangzeb himself seemed inclined to this course.

But Sambhaji, roused to a sense of his disgrace and stung with shame and remorse, expected and wished for nothing but death, and made use of every epithet of abuse to induce some rash soldier to kill him. In this frame of mind when Aurangzeb sent him a message offering life on condition of his becoming a Musalman, Sambhaji answered: Not if you give me your daughter in marriage, and ended by cursing the Prophet. The enraged emperor ordered a red-hot iron to be drawn across his eyes, his tongue to be cut out, and his head to be severed from his body. These orders were publicly carried out in the camp at Tulapur about the beginning of August 1689. [Grant Duffs Marathas, 159-60; and Orme's Historical Fragments, 164.]

Rajaram, 1690.

After Sambhaji's execution Rajaram, Sambhaji's younger brother, was declared regent during the minority of Sambhaji's bon Shivaji, afterwards known as Shahu. In 1690 Raygad fell to the Moghals and young Shivaji and his mother Soyrabai were taken prisoners. Rajaram who was moving from place to place escaped to Ginji in the Karnatak and from Ginji managed his Deccan affairs. Rajaram remained in Ginji till 1698, when he was forced to flee to Vishalgad in Kolhapur. From Vishalgad in 1699, Rajaram, joined by Parsaji Bhonsla, Haibatrav Nimbalkar, Nimaji Sindia, Athavle, Samsher Bahadur, and other Maratha commanders, proceeded with a greater force than Shivaji ever commanded, and passed through Gangthadi, Nander, Berar, and Khandesh claiming chauth and sardeshmukhi. When he had completed his tour, Rajaram left Khanderav Dabhade in Baglan or North Nasik, Nemaji Sindia with the title of Sarlashkar in Khandesh, Parsaji Bhonsla with the title of Senasaheb Subhe in Berar, and Haibatrav Nimbalkar in Gangthadi to collect, as was said, the outstanding balances due to the Raja.

Tarabai, 1700.

In February 1700, Rajaram took shelter in Sinhgad, and died one month later from inflammation of the lungs brought on by violent exertion. When Rajaram died leaving only widows and infants, the power of the Marathas seemed at an end. But Tarabai, the elder widow, with the aid of Ramchandrapant Amatya, Shankraji Narayan, and Dhanaji Jadhav Senapati assumed the government, seated her son Shivaji a boy of ten on the cushion of state, and placed Rajasbai the younger widow in confinement. Tarabai did not fix her residence in any one fort but moved from place to place as seemed advisable [According to Khafi Khan Tarabai won the heart of her officers and

took vigorous measure for ravaging the imperial territory. In spite of all Aurangzeb's struggles and schemes, campaigns, and sieges, the power of the Marathas waxed instead of waning. They penetrated into the old imperial territories, plundering and destroying wherever they went. In imitation of the emperor, who, with his army and enterprising nobles was staying in the Deccan mountains, Tarabai's commanders cast the anchor of permanence wherever they penetrated, and having a appointed kamaishdars or revenue collectors, passed the time to their satisfaction with their wives and children, and tents, and elephants. Their daring went beyond all bounds. They divided all the districts or parganas among themselves, and, following the practice of the imperial rule, appointed their subhedars or provincial governors, kamaishdars or revenue collectors, and rahadars or toll collectors. Khafi Khan Muntakhbu-l-Lubab in Elliot and Dowson, VII. 373-375.] Between 1700 and 1703, Aurangzeb besieged Sinhgad. After a three and a half mouths siege, the fort was bought from the commandant and its name changed to Bakshindabaksh or God's Gift. The army halted for a month at Poona and the neighbouring villages, we

Moghals. Tarabai, 1700.

At Poona prince Muhiul-Mulk the son of Kam Baksh, the son of Aurangzeb, died and Aurangzeb changed the name of Poona to Muhiabad. From Poona the Moghal army marched against Rajgad in Bhor, and by 1705 Purandhar was taken. [Khafi Khan Muntakhabu-I-Lubab in Elliot and Dowson, VII, 373; and Grant Duff's Marathas, 177.] In 1705, after halting 7½ months near Junnar, the emperor guitted the neighbourhood of Poona and marched towards Bijapur. [Grant Duffs Marathas, 178; Elliot and Dowson, VII. 379. As soon as the Moghal troops withdrew Shankraji Narayan Sachiv, the chief manager of the country round, retook Sinhgad and some other places. [Grant Duff's Marathas, 180. The loss of Sinhgad and of Panhala in Kolhapur was a great grief to Aurangzeb. It increased the illness from which he was suffering and from which he recovered very slowly. Zulfikar Khan was sent to retake Sinhaad, and, before his departure the emperor committed Sambhaji's son Shahu to his charge and Zulfikar tried to bring the Marathas to his side by sending letters from Shahu as their lawful prince. From want of supplies Sinhgad yielded to Zulfikar, but, as soon as he retired, from the same cause, it was speedily retaken by Shankraji Narayan.

Shahu's Restoration, 1707.

In 1707 on the occasion of Shahu's marriage with the daughters of the Jadhav of Sindkhed and of Sindia the patil of Kinnarkhed, Aurangzeb conferred on him Indapur and Supa in Poona with other districts. Grant Duff's Marathas, 184. On this occasion Aurangzeb among other presents to Shahu gave him a sword he had himself frequently worn, and restored two swords which Shahu's attendants had always urged Shahu to recover. One of these was Shivaji's famous Bhavani, and the other the sword of Afzul Khan the murdered general of Bijapur all of which were taken at Raygad in 1690 These swords were in the possession of the Raja of Satara in 1826, Ditto. Tarabai and her ministers took advantage of the absence of the main body of the Moghal army. Dhanaji Jadhav defeated Lodikhan the commandant of Poona, and retook Chakan, and the Marathas rapidly occupied as well as plundered the country. In the same year (1707) Aurangzeb died, and steps were taken to release Shahu. On his arrival in Poona means were successfully employed to detach Dhanaji from the cause of Tarabai. An action took place at the village of Khed twenty-two miles north of Poona. in which the Pratinidhi was not supported by Dhanaji and was obliged to fly to Satara. Dhanaji joined Shahu and proceeded towards Chandan-Wandan in Satara. Shahu seized the families of all the men of rank who were acting against him; and summoned Shankraji Narayan the Pant Sachiv to deliver Purandhar which he had taken shortly before; but Shankraji did not obey. In 1711, as he still adhered to the cause of Tarabai, Shahu determined to reduce Shankraji Narayan's territory, which, as it included Rajgad Shivaji's first capital, was considered the centre of Maratha rule. An army was sent towards Poona and took Raigad. Shahu was spared the great labour of besieging the Pant Sachiv's other forts by the news that Shankraji had drowned himself, it was said, out of remorse because he had bound himself by oath to Tarabai to fight against his lawful prince. [Shankraji performed the *jalasamadh* or water-burial by sitting tied to a wooden raft which floated on empty jars pierced with holes. As the jars filled the raft sunk and the person seated on the raft was drowned. Hindu devotees were rather partial to this form of death. Grant Duff's Marathas, 186 foot. Shahu with characteristic conciliation sent robes of investiture to Shankraji's son Naro Shankar a child of two years old and confirmed his *mutalik* or deputy in that post. The Pant Sachiv's party never again swerved from their allegiance to Shahu. [Grant Duff's Marathas, 189.]

Moghals. Shahu, 1707-1717.

In March 1708 Shahu was established at Satara, and in 1710 Tarabai with her son Shivaji [In January 1712 Shivaji, the son of Tarabai, who

was of weak mind, died of small-pox. On his death Tarabai was removed from the administration, and Sambhaji the son of Rajasbai the younger widow of Rajaram was appointed in her stead. Tarabai and Bhavanibai her son's widow, who is said to have been pregnant at the time of her husband's death, were put into confinement.] went to Kolhapur and established herself there. Chandrasen Jadhav, who had been appointed senapati or commander-in-chief on his father Dhanaji's death, was sent from Satara with a considerable army to levy the chauth, sardeshmukhi, and ghasdana from the Moghal districts. On this occasion Chandrasen was attended by his father's agent or karkun Balaji Vishvanath, [Balaji Vishvanath was the kulkarni or village accountant of Shrivardhan in Janjira, a village then claimed by the Sidi from which in consequence of some intrigue connected with the Sidi's enemy Angria he had fled to Sasvad in Poona, and was recommended to Dhanaji Jadhay by Abaji Purandhare and Parashuram Trimbak.] the founder of the Peshwas of Poona who was now charged with collecting the Raja's share of the revenue, a position of control very galling to Chandrasen. A dispute about a deer which had been run down by one of Balaii's horsemen forced Balaii to flee for his life. He fled first to Sasvad, where the Sachiv's agent in Purandhar did not think it prudent to protect him. His pursuers were in sight but the commander of the fort would not allow him to enter. With a few followers, among whom were his sons Bajirav and Chimnaji, Balaji Vishvanath attempted to cross to Pandugad fort in the opposite valley, but the Jadhav's horsemen were on his track and searching for him in every quarter. Balaji managed to hide himself for a few days. Then two Marathas, Pilaji Jadhav and Dhumal, two of his self-horsed troopers, undertook to carry him to a place of safety. They gathered a small troop of horse, and, though they were attacked on the way and a man on each side of him had to hold on Balaji who could not ride, they carried him and his sons out of danger. After this Chandrasen, Balaji's rival, left the Marathas and took service with the Nizam, and, with the Nizam's help, drove back Shahu's forces from the Godavari to the Bhima. To support his local troops Shahu sent Balaji whom he dignified with the title of sena kurt or army agent. Balaji joined Haibatrav Nimbalkar, and they together fell back on Purandhar. A battle was fought which the Marathas claim as a victory, but which seems to have been a defeat as they afterwards retreated to the Salpa pass. Poona was overrun by a detachment of Marathas in the Nizam's service under Rambhaji Nimbalkar. An agreement was made, and, as was their custom, the Moghal troops retired for the rains to Aurangabad. As soon as they were gone, under different leaders, the Marathas spread plundering over the country. All the leading Hindu deshmukhs and deshpandias in the Moghal parts of the Maratha country fortified their villages on

pretence of defending them, but often joined and helped their countrymen. As Nizam-ul-Mulk favoured the Kolhapur party, Shahu's influence continued to decline. In the prevailing anarchy Damaji Thorat, who was attached to the cause of Kolhapur, strengthened a mud fort in the village of Hingni or Hingangaon, near Patas, about forty miles east of Poona and levied contributions about thirty miles round. Balaji Vishvanath, who set out to reduce Damaji, was seduced to a conference, treacherously seized, and thrown into confinement, together with his friend Abaji Purandhare, Balaji's two sons Bajirav and Chimnaji, and several of their immediate retainers. Thorat threatened them with torture and death if they did not pay a large ransom. The ransom was paid, and the Sachiv was sent against Damaji. But he was defeated and himself and his chief agent made prisoners.

Balaji Vishavanath, First Peshwa, 1714-1720.

About the same time Bahiropant, Shahu's minister or peshwa, undertook an expedition into the Konkan to repel the pirate chief Angria of Kolaba. Bahiropant was defeated and made prisoner. Angria advanced and took the forts of Rajmachi and Lohogad in west Poona. Angria intended to inarch on Satara, but he was met and defeated by Balaji. After the defeat, Balaji, by the grant of ten forts and sixteen fortified places in the Konkan, persuaded Angria to forsake the cause of Kolhapur and become tributary to Shahu. The ten forts were Khanderi, Kolaba, Suvarndurg, Vijayadurg, Jaygad, Devdurg, Kanikdurg, Fategad, Auchitgad, and Yasvantgad; the sixteen fortified place were Bahirugad, Kotla, Venkatgad, Manikgad, Mirgad, Sagargad, Rasalgad, Palgad, Kharepatan, Ramdurg, Rajapur, Ambar, Satavli, Kamte Shrivardhan, and Manranjan. In consequence of this valuable service, in 1714, Balaji Vishvanath was appointed Peshwa in place of Bahiropant Pingle who was removed. Balaji's friend Abaji Purandhare was confirmed as his deputy or *mutalik* and Ramajipant Bhanu the ancestor of the celebrated Nana Fadnavis as his secretary or fadnavis. After Ghandrasen Jadhav deserted to the Moghals in 1710, Manaji More had been appointed Shahu's commander-in-chief or senapati. Since then he had performed no service of distinction. Balaji Peshwa now arranged that Manaji, the commander-in-chief with Haibatrav Nimbalkar should reduce Damaji Thorat. Before hostilities began Balaji succeeded in procuring the release of Damaji's prisoner the Pant Sachiv, and, in gratitude for this service, the Pant Sachiv's mother presented Balaji with all the Paul, Sachiv's rights in Purandhar and gave him the fort as a place of safety for his family whose headquarters had hitherto been at Sasvad. This transfer was confirmed by Shahu. The force assembled in the Poona district under Manaji was too powerful for Thorat. He was driven back, Hingangam his fort was stormed and destroyed, and himself made prisoner. In 1715 Balaji Peshwa induced the Moghal agent for the Poona district, a Maratha named Baji Kadam, to make over the superior authority to him on the promise that Rambhaji Nimbalkar's estates should be respected. As soon as he acquired this authority Balaji turned his attention to putting down the free-booters with whom the country swarmed, ho stopped revenue-farming, and encouraged tillage by granting leases at low rates. Negotiations between Shahu and the court of Delhi were set on foot, in consequence of which in 1718 Balaji, in command of a large contingent, was sent to Delhi to assist the Sayads.

MARATHAS

MARATHAS (1720-1817).

This was the beginning of Maratha influence at Delhi with which till 1803 they were so closely connected. The battle of Shahapur destroyed the power of the Sayads, and established Muhammadshali upon the throne of the decaying empire. Balaji succeeded in obtaining from the imperial court three grants one for the *chauth* or one-fourth of the whole revenue of the six subhas of the Deccan, including the Haidarabad and Bijapur territories, the Karnatak, and the tributary states of Tanior, Trichinopoli, and Maisur, and a second for the sardeshmukhi or additional one-tenth of the Deccan revenue. The third grant was for the svaraj or home-rule by the Marathas of sixteen districts, which they stated Shivaji held at the time of his death. The svaraj or home-rule districts were Poona, Supa including Baramati, Indapur, Vai, the Mavals, Satara, Karhad, Khatav. Man, Phaltan, Malkapur, Tarla, Panhala, Ajra, Junnar, and Kolhapur; the parganas of Kopal, Gadag, Halyal, and all the forts which were captured by Shivaji to the north of the Tungbhadra, and Ramnagar in the Konkan including Gandevi, Jawhar, Cheul, Bhimgad, Bhiwndi, Kalyan, Rajpuri, Dabhol, Javli, Rajapur, Phonda, Akola, and Kudal. The six subhas of the Deccan were Aurangabad, Bedar, Berar, Bijapur, Haidarabad, and Khandesh, yielding an estimated revenue of Rs. 18,05,17,300, the sardeshmukhi on which was Rs. 1,80,51,730, and the *chauth* and other rights Rs. 11,75,16,762. Grant Duff's Marathas, 200. Under this arrangement almost the whole of Poona, Supa, Baramati, Indapur, and Junnar became part of the Maratha home rule, In reward for his services on the occasion Balaji Vishvanath received several districts near Poona in personal grant or *jagir* including the fort of Lohogad.

Bajirav Ballal, Second Peshwa, 1720-1740.

Not long after (1720) Chinkalich Khan, better known as the Nizam-ul-Mulk, who, after the murder of the emperor Ferokshir, had been appointed governor of Malva, revolted, and crossing the Narbada and defeating the imperial forces at Burhanpur and Balapur, made himself independent in the Deccan. Balaii's health had suffered considerably from the fatigue of the journey to and from Delhi and the labour he bestowed on the management of affairs after his return. He was allowed to retire for rest to his family seat at Sasvad, where he died in a few days in April 1721. He left two sons, Bajirav and Chimnaji, and two daughters Bhiubai married to Abaji Naik the brother of Bapuji Naik, a rich banker of Baramati, and Annubai, the wife of Narayanrav Ghorpade of Ichalkaranji in the Bombay Karnatak. For nearly seven months after his father's death Balaji's eldest son Bajirav was not formally invested with the dignity of Peshwa. At last Bajirav received his robes, his brother Chimnaji received the command of an army under the Peshwa and the district of Supa in grant or jagir, and Abajipant Purandhare, their father's head agent, was reinvested by Shahu [Grant Duff's Marathas, 209.] Soon after his appointment Bajirav Peshwa set out with an army for Khandesh, but, till 1724, he was forced every year to return to Satara. Bajirav's great design was to extend Maratha power in North India. [Grant Duff's Marathas, 212.] In a debate before Shahu he said, Now is our time to drive strangers from the land of the Hindus and to gain undying renown. By turning our efforts to Hindustan the Maratha flag shall fly from the Krishna to the Attok. Let as strike at the trunk of the withering tree and the branches most fall of themselves. Shahu for the moment roused to something of his grandfather's spirit replied, You shall plant my flag on the Himalayas. You are a noble son of a worthy father. At this time several Maratha officers, who afterwards became independent leaders or founders of states, rose to distinction. The chief of these were Malharji Holkar, the ancestor of the Holkars of Indur then chaugula or assistant headman of the village of Hoi on the Nira, Ranoji Sindia the ancestor of the Sindias of Gwalior, the Peshwa's slipper-bearer, Udaji Povar the ancestor of the Povars of Dhar an enterprising warrior of Malwa, and Pilaji Gaikwar the son of Damaji Gaikwar the ancestor of the Baroda Gaikwars. [Grant Duff's Marathas, 212.] In 1731 Bajirav remained at Poona and employed himself in the internal management of Maratha affairs. His victory over his rival Trimbakray Dabhade the Maratha commander-in-chief or Senapati like the issue of every civil war left unfriendly feelings in many minds. Bajirav took every means to regain goodwill, among others continuing Dabhade's practice of feeding some thousand Brahmans for several days. This charitable practice Bajirav continued at Poona and gave sums of money at the same time to the assembled Shastris and Vaidiks. This festival was

continued by his successors and was known by the. name of Dakshina or money gifts. [Grant Duff's Marathas, 205, This dakshina fund is now used for promoting ernacular literature and providing fellowships in the two arts colleges in Poona and Bombay. In 1734 Balaji was most successful in the north gaining Malwa and the territory between the Chambal and the Narbada, and, in 1739, his brother Chimnaji drove the Portuguese from almost all their leading possessions in the North Konkan. Bajirav died in 1740. He left three sons, Balaji the eldest who succeeded him as Peshwa, Raghunathrav the second afterwards so well known to the English, and Janardan Bava who died in early youth. He left one illegitimate son by a Muhammadan mother whom he bred as a Musalman and named Samsher-Bahadur. Bajirav was ambitious, a thorough soldier, hardy, self-denying, persevering, and patriotic. Maratha pictures represent him eating fried *jvari* ears or *hurda* as he rides at the head of a troop of Maratha soldiers. He was no unworthy rival of Nizam-ul-Mulk, and wielded the mighty arm of Maratha power with incomparable energy. While the main body of his army remained encamped on the Shivganga, Raghuji Bhonsla the Sena Saheb Subha or commander-in-chief returned to Satara, and endeavoured to prevent Balaji Bajirav's succession as Peshwa by proposing for the vacant office Bapuji Naik, a Brahman banker of Baramati, a connection but an enemy of the late Peshwa who was Bapuji's debtor for a largo sum.

Balaji Bajirav, alias Nanasaheb, Third Peshwa, 1740-1761.

Chiefly by the help of his uncle Chimnaji, Balaji's claims-prevailed, and he was invested in August 1740. The disappointed Bapuji Naik at first pressed Balaji hard to pay his father's debts. Balaji, was relieved from this annoyance by the influence and credit of his agent or *divan*, Mahadajipant Purandhare. In 1741, on the death of his uncle Chimnaji, Balaji Peshwa returned from the northern districts and spent nearly a year in improving the civil administration of Poona and Satara. From this till 1745, a time of comparative quiet in the Deccan, Balaji encouraged agriculture, protected the villagers and grain merchants, and caused a marked improvement in the state of the country.

Shahu's Death, 1749.

Shahu died in 1749 and was succeeded by Ram Raja, the posthumous son of the second Shivaji whose birth in 1712 was kept a secret. Before his death Balaji obtained a deed from Shahu Raja empowering him to manage the Maratha empire, on condition of perpetuating the Raja's name and keeping up the dignity of the house of Shivaji

through the grandson of Tarabai and his descendants. Balaji left the Raja in Raghuji's charge and went to Poona, and from this time Poona became the capital of the Maratha empire. Tarabai, whom Balaji had almost overlooked, although seventy years of age, showed him how dangerous it was to slight a woman of her spirit. On pretence of paying her devotions at her husband Rajaram's tomb in the fort of Sinhgad, she endeavoured to persuade the Pant Sachiv to declare for her as the head of the Maratha empire. After much persuasion Balaji induced Tarabai to come to Poona, and, flattering her ambition with the hope of a large share in the administration, persuaded her to use her influence with Ram Raja to confirm his sehemes. The Maratha chiefs were subservient to the Peshwa's views and were not likely to cause opposition. Balaji owed much of his success to his minister or divan, Mahadajipant, who, except Sadashivrav his cousin had more influence than any one over Balaji. Through Sadashivrav's influence, Ram Raja the new Satara chief agreed to renounce the entire power, and to lend his sanction to whatever measures the Peshwa might pursue. After Balaji's scheme had so far prospered, it was nearly ruined by a quarrel between him and his cousin Sadashivrav. Sadashivrav applied to Balaii for the same share of authority as had been enjoyed by Sadashivrav's father Chimnaji Appa. To this Balaji would not agree as he was anxious that the second place should be held not by Sadashivrav but by Mahadajipant Purandhare to whom Balaji was under deep obligations. Sadashivray in anger accepted the position of Peshwa to the chief of Kolhapur. As this guarrel was likely seriously to weaken, the power of the Peshwa, Mahadajipant gave up his post and Sadashivrav came to Poona us the Peshwa's minister or divan. [Grant Duff's Marathas, 271 -272.]

In 1750 Balaji Peshwa arranged that the Pant Sachiv should give him Sinhgad in exchange for Tung and Tikona in Western Poona. [Grant Duff's Marathas, 271-272.] He then marched with an army towards Aurangabad. In 1751 as Damaji Gaikwar did not comply with Balaji's commands, the Peshwa sent private orders to seize some of the Gaikwar and Dabhade families, who were living at Talegaon, and imprison them in the hill-fort of Lohogad. He also treacherously surrounded, attacked, and plundered Damaji's camp which was near him at Satara, and kept him in confinement in the city of Poona. [In consequence of this treachery Damaji is said ever after to have refused to salute the Peshwa except with his left hand. Grand Duff's Marathas, 274.] During the same year (1751) the Moghals, supported by the French, advanced towards Poona, totally destroying every village in their route, Balaji, alarmed at their progress, endeavoured to negotiate, and at the same time to arouse suspicion and jealousy of

the French among Salabat Jang's officers. Monsieur Bussy, the French general, as the best means of counteracting such schemes and securing influence with the Nizam, exerted himself with judgment and energy, lie planned an attack on the Maratha, camp at Rajapur on the Ghod river on the night of the 22nd of November, at the moment of an eclipse of the moon when the Hindus were at prayer. The Maratha army fled before him, and though only one man of consequence was wounded, some valuable booty was taken particularly some gold vessels; belonging to the Peshwa. This success added greally to Bussy's reputation. In spite of the surprise, new day the Marathas were as active as ever, Still the Moghals pressed on, plundered Ranjangaon, and totally destroyed Talegaon Dabhade. At last on the 27th of November they were attacked by the Marathas with the greatest determination, and nothing but the French artillery saved them from total defeat. The Marathas were led by Mahadajipant Purandhare, the late divan, supported by the two sons of Ranoji Sindia, Datteji, and Mahadji, and by Konher Trimbak Ekbote whose feats of valour gained him the title of *Phakde* the hero. Still the Moghals pressed on to Koregaon on the Bhima. Negotiations were opened but vere stopped by the news that the Marat has had taken the Moghal fort of Trimbak in Nasik. Salabat Jung demanded that the restoration of Trimbak should form part of any settlement. This Balaji refused and the Moghals moved towards, Junnar continually harassed by the Marathas. At last, an armistice was concluded and the Moghals returned to Haidarabad (1752). During the next year the armistice was turned into a peace. Balaji returned to Poona and soon after prepared a largo force for an expedition into the Karnatak which turned out to be the most profitable in which he was ever engaged. [Grant Duff's Marathas, 280, Before he left for the Karnatak Balaji endeavoured to arrange a compromise with Tarabai against whom a force had been sent in the previous year. In June 1751 Balaji returned to Poona from the Karnatak. Damaji Gaikwar, who had been imprisoned a Poona since 1751, was anxious to procure his release and Balaji entered in to terms, when, among other points it was arranged that Damaji should pay a sum of £150,000 (Rs. 15,00,000), should set apart for the Peshwa half of the territory conquered by him in Gujarat, and should pay a large sum as deputy commander-in-chief.

In 1751, with the object of gaining possession of Surat then the chief centre of trade in Western India, Raghunathrav, Balajis brother, had been sent to Gujarat, but was recalled without effecting his object. Nothing more was done till at the close of the rains of 1754, to spread Maratha power in Gujarat and to carry out the settlement made with Damaji, Raghunathrav started on a second expedition to Gujarat.

Shortly after a second expedition which Balaji accompanied for some distance in person proceeded to the Karnatak. Balaji, who was naturally indolent, left the burden of military affairs to his brother Raghunathrav and the civil administration to his cousin Sadashivrav. For more than the life of a man plunder and violence had been general. An improvement was begun at this time by Ramchandra Baba Shenvi the friend and adviser of Sadashiv and after his death was carried on by Sadashiv Chimnaji.

In March 1753, Raghuji Bhonsla the Sena Saheb Subha died. Before his death he counselled his son to preserve union in the Maratha empire. Soon after, with the object of being confirmed in his father's office, Raghuji's son Janoji came to Poona. Encouraged by Janoji's approach, and, on the Peshwa's assurance of safety, Tarabai, the aged head of the Satara state, came to Poona. She was received with great attention and agreed to the Peshwa's former proposals. Balaji professed much anxiety for the release of Ram Raja, the Satara chief, who was then in confinement in Satara fort. He pressed the point, being anxious that Ram Raja should be kept in confinement and judging that to profess the opposite view was the likeliest means to bring Tarabai to take the course he wished. This calculation was correct and the chief remained a prisoner. Janoji Bhonsla agreed to the terms subscribed by his father. Ho undertook to furnish 10,000 horse for the service of the state and to pay £90,000 (Rs. 9 lakhs) a year to meet the cost of the establishment of the Satara chief. Janoji was formally invested as Sena Saheb Subha, and Balaji approved of the treaty Janoii had made in 1751 with Alivardi Khan of Haidarabad, under which the Marathas were to receive a share of the revenues of Orissa. Janoji then left for Berar.

In July 1755 Balaji Peshwa returned from an expedition into the Karnatak, Shortly after Balaji's return Muzaffar Khan, who had been dismissed from the Nizam's service appeared at Poona, made humble apologies to the Peshwa and promises of good conduct, and was again entertained contrary to Sadashivrav's advice. In April 1756 the capture of Angria's stronghold of Gheria or Vijaydurg in Ratnagiri and the destruction of Angria's power at sea was the first achievement which raised the English to importance as a political power in Western India. A land force of the Peshwa's had acted with the English fleet. They had given little aid and by intrigues with Angria had tried to secure Gheria for themselves. This attempt was discovered and prevented by the English, and the English were in the strong position of holding Gheria of which Balaji was most anxious to gain possession. In October 1756,Mr.John Spencer and Mr. Thomas Byfield, members of the

Bombay Council, came to Poona and had a long interview with Balaji Peshwa at which Raghunathrav the Peshwa brother and Sadashivrav the Peshwa's cousin were present As news had reached him that M. Bussy had been restored to power at Haidarabad Balaji was anxious to obtain the services of a body of English troops. To this Mr. Spencer was instructed not to agree, though, at the same time, he was to let the Peshwa know that Salabat Khan had been asking the Madras Government to supply him with English troops to aid him in driving out the French. Balaji expressed strong disapproval of any alliance between the English and the Nizam. Under a treaty concluded on the 12th of October 1756 Balaji agreed to allow the Dutch no share in the trade of the Maratha dominions, and the English agreed to cede Gheria to Balaji receiving in exchange ten villages including Bankot in the Central Konkan and the sovereignty of the Bankot river. Balaji engaged to give no territory to Angria and to settle with the Sidi of Janjira regarding his customs dues in the Bankot river. He also agreed to waive all claims on the English company and to levy on English merchandise no additional inland duties. Grant Duffs Marathas, 298. Shortly after (1756) Raghunathray, with Sakharam Bapu as his agent or divan started for Hindustan. They were joined by Malharav Holkar, and together advanced to Delhi and broke the power of Ahmad Abdalli who was forced to retire to Afghanistan. This, though one of the most successful of Maratha campaigns, was costly, and was not rewarded with any large share of booty. At the close of 1756 Balaji led an army south to the Karnatak, and crossed the Krishna in February 1757. Meanwhile news had come that the English were in trouble in Calcutta, and that war had broken out in Europe between England and France. This caused a change in Balaji's attitude to the English. He wrote to the Madras Government, forwarding a letter to the king of England, written with much less friendliness than he had shown in the negotiations with Mr. Spencer, and, in spite of the provision in the 1756 treaty agreeing to waive all claims on the English Company, asking for the treasure and stores which the English had carried off from Gheria. This request was probably made not in the hope of getting the Gheria spoils, but preparatory to demands for a share in the revenues of the Moghal provinces of the eastern or Payin Ghat that is lowland Karnatak in which the English had now a direct interest. About May 1757 Balaji returned from the Karnatak with the greater part of his army successful to Poona.

During the next two years Balaji took a considerable part in Haidarabad affairs where a plot was on foot to cause a revolution and drive out the French. In March 1759 Balaji succeeded for a time in keeping the English from taking Surat castle, but through the ability of

Mr. Spencer and the military talents of Admiral Watson the castle and with it the post of Moghal admiral passed to the English in the same year. At Poona the civil administration continued under the management of Sadashivray, Balaji's cousin. Sadashivray was violent and grasping but active and vigorous, and though proud and unbending, had a large share of good nature and good sense. He was open to bribes but not under circumstances to which Maratha ideas attached shame. Sadashivrav had a bitter enemy in Balaji's wife Gopikabai, who feared that Sadashivrav would prevent her sons from gaining their proper position and power in the state. To remove her fears Sadashivrav was urgent in recommending to Balaji the early employment of his eldest son Vishvasrav in war and in civil affairs. In spite of Sadashivray's goodwill in this matter, Gopikabai nursed a bitter dislike of Sadashivrav and did what she could to arouse unfriendly feelings between him and her husband Balaji. This ill feeling did not turn to open discourtesy till the return of Ragunathrav from North India in 1759. Sadashivrav blamed an arrangement of Ragunathrav's which had caused a loss to the state, and Ragunathrav left him in anger telling him he had better take command of the next expedition. The guarrel between Ragunathrav and Sadashivrav spread to other members of the family, and the ill feeling became still stronger after an attempt on Sadashivrav's life by Muzaffar Khan whom, contrary to Sadashivrav's advice, Balaji had received back to favour. There was no proof that either Balaji or Ragunathrav was a party to the plot. In 1760 the arrangement which had been suggested by Ragunathrav in anger, that Raghunathrav should take Sadashivray's place at the head of civil affairs in the Deccan and that Sadashivrav should take Ragunathrav's place at the head of the Maratha army in North India was carried out. Before Sadashivray left with his army for North India, news came of the success of an intrigue for the surrender of the strong fort of Ahmadnagar, which for a sum of money was betrayed into the hands of a Brahman agent of Sadashivrav's by Kavi Jang the Moghal commandant, his act of treachery brought on a war with the Nizam. Balaji marched with a large army to Ahmadnagar, and Sadashivrav moved eastwards.

Udgir, 1760

The Moghal army under Salabat Jang and Nizam Alimet Balaji's army at Udgir on the banks of the Manjra about one hundred miles east of Ahmadnagar, and chiefly by the brilliant courage of Sadashivrav ended in a severe defeat to the Nizam. Under the terms of a treaty concluded after this important victory, Shivner in Poona, Daulatabad, Asirgad, Bijapur, and the province of Aurangabad were made over to the

Marathas. These territories yielded an estimated yearly revenue of over £620,000 (Rs. 62 *lakhs*). Of the whole territory portions yielding an estimated yearly revenue of £410,000 (Rs. 41 lakhs) were according to the Peshwa's practice granted as military estates or *jagirs*. Towards the close of 1760 Sadashivrav marched to North India in command of the richest army which the Marathas ever assembled.

Panipat, 1761.

In the middle of January 1761 news of the ruin of the Marathas at Panipat reached Peshwa Balajirav in the Godavari valley. The message ran: Two pearls have been dissolved, twenty-seven gold *mohars* have been lost, of the silver and copper the total cannot be cast up. Balaji understood that the two leaders his cousin Sadashivrav and his eldest son Vishvasrav were slain, numbers of his nobles lost, and the mass of the proudest army the Marathas ever put in the field destroyed. Balaji retired slowly to Poona. The blow crushed him, his mind gave way, and he died in the end of June in the temple he had built on Parvati hill close to the south of Poona.

Though tinder Balaji the Maratha power was at its highest, and though the Marathas praise the time of his rule, Balaji owed more to his father and grandfather and to his brother Raghunathrav and his cousin Sadashivrav than he owed to himself. He was lazy sensual and dissipated, but kind generous and charitable. He loved intrigue and hated violence. He had great address, polished manners, and considerable political sagacity, tempered by a cunning which passed for wisdom Though perhaps less well-ordered than it became about thirty years later under Nana Fadnavis, under Balaji Bajirav the administration of the country round Poona was greatly improved.

Condition, 1714-1760

Balaji Vishvanath the first Peshwa (1714-1720) had done good by stopping revenue-farming, by granting land on cheap leases, and by encouraging villagers to protect themselves from the exactions of petty chiefs. Still, till about 1750, the country round Poona was full of turbulence and disorder. Balaji Bajirav appointed *mamlatadars* and *subhedars* to the different districts and over them in the more distant parts placed a *sarsubhedar* or provincial governor. Poona and the other lands between the Godavari and the Krishna, though the best protected territories under Maratha rule, had no governor. Instead of being under a governor they were under the Peshwa's favourites and courtiers, who had absolute police, revenue, and judicial power. They

stayed at court, governed by deputy, allowed their districts to fall into disorder, paid to the state but a small share of their revenues, and furnished no accounts. Balaji Bajirav was too indolent to reform these abuses. But Sadashivrav, acting on a policy which was started by Ramchandra Baba Shenvi, appointed a governor or sarsubhedar, and, in spite of opposition which in one case had to be met by forced compelled the managers of the districts to produce their accounts and to pay the state its share of the revenue. A respectably Shastri was placed at the head of justice and the police was greatly improved. These reforms and the Peshwa's success in war, which enriched the Deccan with the spoils of great part of India, improved the state of the people. The Maratha peasantry have ever since blessed the days of Balaji Bajirav, or as he was commonly called Nana Saheb Peshwa.

[Grant Duff's Marathas, 320-322.]

Madhavrav Ballal, Fourth Peshwa, 1761-1772.

Though power had so entirely passed from the Satara chief that had to get leave from the Peshwa to appoint an agent to collect his dues as hereditary deshmukh of Indapur, Balaji's second son Madhavrav, then in his seventeenth year, in September 1701 went to Satara to receive investiture. The young Madhavrav and his uncle Raghunathrav who was appointed regent had to face the difficulties which the ruin of Panipat had brought upon the heads of the Maratha empire. The first difficulty was in the Konkan where the English sided with the Sidi of Janjira, saved his state from destruction by the Marathas, and forced the Marathas to restore part of the Sidi's lands which they had taken. [Grant Duff's Marathas, 324.] Raghunathray agreed to these terms because he knew that Nizam Ali was collecting a large force in the hope of winning back the territories which had been lost to Haidarabad by the defeat of Udgir in 1760. The Peshwa's finances were low and the Maratha nobles held back from coming to the Peshwa's help. Raghunathray, in the hope of securing the services of English troop, offered the Bombay Government large cessions of territory, near Jambusar in Gujarat. What the Bombay Government wanted was the island of Salsette but this Raghunathrav was most unwilling to give. While negotiations went on, the Moghal army had advanced close to Ahmadnagar. At Toka about forty-live miles east of Ahmadnagar the Muslman destroyed some Hindu temples, and most of the Marathas in their army deserted to the Peshwa carrying with them Mir Moghal Nizam-ul-Mulk's youngest son. The Moghals, though opposed with, spirit, continued to advance. At last in 1762, within fourteen miles of Poona, negotiations were opened and on the cession of land in Aurangabad and Bedar yielding £270,000 (Rs. 27 lakhs) a year the

Moghal army retired. When the danger from the Moghals was at an end Raghunathrav's anxiety for English soldiers ceased, and the negotiations about ceding Salsette to the English were rudely broken off. [Grant Doffs Marathas, 325.]

When the treaty with the Nizam was concluded, Madhavray the young Peshwa, attended by Trimbakrav Mama the maternal uncle of the late Sadashivray, was sent south to collect the revenue, and Nizam Ali returned towards Bedar, [Colonel Wilks does not mention this expedition into the Karnatak. Shortly after Madhavrav returned to Poona, his auxiety to share in the administration brought on disputes between him and his uncle Raghunathray, Raghunathray, Sakharam Bhagavant Bokil better known as Sakharam Bapu, and several other ministers resigned. Madhavrav promptly asked Trimbakrav Mama to act as minister or divan, and next under Trimbakray appointed Gopalrav Govind Patvardhan, Jagirdar of Miraj. At the same time Madhavrav chose as his personal agents, or *karkuns*, Haripant Phadke and Balaji Janardan Bhanu, afterwards the famous Nana Fadnavis. The failure of his plan to force Madhavrav to keep him in power and the mutual hatred of Anandibai Raghunathrav's wife and Gopikabai Madhavrav's mother so enraged Raghunathrav that he retired from Nasik to Aurangabad, and on promise of ceding Daulatabad, Asirgad, Ahmadnagar, Shivner, and territory yielding £510,000 (Rs. 51 lakhs), he was assisted by a Moghal army, with which half-way between Poona and Ahmadnagar he met and defeated Madhavrav. Madhavrav saw that a war between him and his uncle must cause a complete split in the Maratha state. He accordingly threw himself into Raghunathray's power, who placed him in confinement but treated him with respect. Raghunathray, being now in uncontrolled power, appointed Sakharam Bapu and Nilkanthrav Purandhare his principal ministers, bestowing on Sakharam an estate worth £90,000 (Rs. 9 lakhs) and giving Nilkanthray the command of Purandhar fort He raised his own infant son Bhaskarrav to the office of Pratinidhi or deputy, and made Naro Shankar his deputy. These and other changes gave much offence, and, when, to gratify personal hatred, Raghunathrav took the fort of Miraj from Gopalrav Patvardhan, Gopalrav and many Maratha nobles went over to the Nizam.

In the war which followed the Maratha troops ravaged the Nizam's country, and Nizam Ali advanced and plundered Poona, taking much property and destroying and burning all houses which were not ransomed. Shortly after, in 1763, the violence of the rains forced the Moghals to withdraw to Aurangabad. In the same year Janoji Bhonsla, who had been won to the Nizam's side by the promise of the Satara

regency, found the Nizam's promises deceptive and returned to the Peshwa. In the battle which followed at Rakisbon or Tandulja, in great measure owing to the courage and military talent of Madhavray, the Marathas gained a complete victory. After peace was concluded with the Nizam, on the death of Raghunathray's son Bhaskarray, Bhayanray was restored to his rank of Pratinidhi, Miraj was given back to Gopalrav Patvardhan, and on Balaji Janardan Bhanu afterwards known as Nana Fadnavis was bestowed the office of Fadnavis. In 1764 a largo army was assembling at Poona to act against Haidar Ali who had risen to power on the ruins of the Hindu state of Maisur. Madhavrav insisted on his right to command this army while his uncle remained at Poona to conduct the government. Sakhararn Bapu joined in supporting Madhavrav. Raghunathrav yielded but retired in anger to Anandveli near Nasik. These discussions delayed the Peshwa's advance, and, before he could reach the Karnatak, Gopalrav Patvardhan was defeated by Haidar's general Fazal ulla Khan with great loss. Madhavrav was more successful. In the month of May ho entered the Karnatak with an army of 30,000 horse and about the same number of infantry and near Amravati inflicted a severe defeat on Haidar Ali. This led to a treaty under which Haidar engaged to restore all places wrested from Murarray Ghorpade, to relinquish all claims on the Nawab of Savanur, and to pay £320,000 (Rs. 32 lakhs) to the Peshwa. After this treaty was concluded Madhavrav left the Karnatak and reerossed the Krishna by the end of February 1765. The ill feeling between Madhavray and Raghunathray continued to be fostered by the hatred of Gopikabai, and Anandibdi. As Madhavrav knew that Raghunathrav could at; this time gain the aid either of Nizam Ali or of Janoji Bhonsla, he, in 1766, concluded a secret alliance with Nizam Ali who hoped to persuade Madhavrav to join him in attacking Haidar Ali. During the same year Nizam Ali entered into an alliance with the English with the object of overthrowing Haidar and restraining the spread of the Marathas. In 1767 Madhavray, who probably felt that the combination of the English and Nizam must be partly directed against him, advanced by himself into the Karnatak, levied £300,000 (Rs. 30 lakhs) from Haidar and £170,000 (Rs. 17 lakhs) from other powers in the Karnatak, and returned to the Deccan before the Nizam had taken the field. The English and the Nizam sent envoys to claim part of the Maratha plunder, but they were treated with broad and undisguised ridicule. [Grant Duffs Marathas, 337.]

In 1768 Mr. Mostyn came to Poona as envoy from the Bombay Government to try and secure an assurance that the Peshwa would not join in alliance with Haidar and the Nizam. Madhavrav refused to give any promise and told the envoy that he would be guided by

circumstances. In April of the same-year, with the help of Damaji Gaikwar and Gangadhar Yashvant the divan of Holkar, Raghunathrav collected a large army at Nasik and marched about fifty-five miles north to the neighbourhood of the hill fort of Dhodap. As he was waiting at Dhodap in the hope of being joined by Janoji Bhonsla of Berar, Madhavrav surprised Raghunathrav's army, took him prisoner, and carried him to Poona where he confined him in the Peshwa's palace. In 1769 to punish Janoji for the support he had given to Raghunathray, the Peshwa advanced towards Berar, and Janoji wheeled to the west and began to plunder the country on the way to Poona. After Poona was destroyed by Nizam All in 1763, Madhavrav had proposed to surround it with a wall. This design was afterwards abandoned on the ground that no fortified plain city could be as safe as Sinhaad and Purandhar. On Janoji's approach the people of Poona sent off their property. Madhavrav ordered Gopalrav Patvardhan and Ramchandra Ganesh to move against Janoji with 30,000 horse, but Gopalrav was in league with Janoji and took no steps to stop his plundering. Madhavrav shortly after was forced to make a treaty with Janoji. He next ordered Visaji Krishna Binivale, accompanied by Ramchandra Ganesh, Tukoji Holkar, and Mahadji Sindia the illegitimate son of Ranoji Sindia and the successor in the family estates of his nephew Jankoji, to start at once with an army to Malwa. In spite of these urgent orders Madhavray, two or three days after, when riding to his favourite village of Theur thirteen miles east of Poona, found Mahadji's camp without a sign of moving. He instantly sent word to Mahadji, that if on his return from Theur he found a tent standing or his troops in sight he would plunder the camp and take his estates. This expedition to Northern India was extremely successful, and a heavy tribute was imposed on the Jats. Though so constantly pressed by wars and rebellions, Madhavrav did much to improve the civil government of his country. His efforts were greatly aided by the celebrated Ram Shastri, an upright and pure judge in almost universal corruption. One of Madhavrav's first acts was to stop the practice of forcing villagers to carry baggage without pay. The practice was so common, that the order putting a stop to it occasioned much discontent and many of the leading men disregarded the order. Madhavrav, who had an excellent system of spies, learned that some valuable articles belonging to the *subhedar of* Bassoin were being carried by forced labour. He seized and confiscated the property, and levied a heavy fine to repay the people for being taken from their fields. He issued fresh orders, which none who knew his system of spies dared to disobey. In the fair season of 1770, Madhavrav had leisure to turn his attention to the Karnatak, where Haidar Ali, having made peace with the English, not only evaded the Maratha demands

but levied contributions on the Peshwa's vassals. To punish this insult, in November, Madhavrav sent forward a large body of horse under Gopalrav Patvardhan and Malharrav Rastia, himself following at the head of 20,000 horse and 15,00 foot. His progress was successful and he reduced several places of strength. In June an attack of the disease which was wasting him, a consumption which he believed was brought on by the curse of the mother of the Kolhapur chief, forced Madhavrav to return to Poona, leaving Trimbakrav Mama to carry on the war. In 1771, as soon as the season allowed, Madhavrav marched from Poona intending to join Trimbakrav Mama. he was again taken ill, and made over the command to Apa Balvant who defrated Haidar and forced him to come to terms. During the rainy season Madhavrav's health so greatly improved that he seemed to have shaken off his disease. But in March 1772 his sickness returned. This attack was pronounced incurable, and on the morning of the 18th of November he died at Theur in the 28th year of his age. He left: no children, and his widow Rambai, who had a go at love for him, burnt herself with his body. The death of Madhavrav, says Grant Duff, occasioned no immediate commotion. Like his own disease it was at first scarcely perceptible, but the root which nourished the far-spreading tree was cut from the stem. The plains of Panipat were not more fatal to the Maratha empire than the early end of this excellent prince, brave, prudent, fond of his people, firm, and successful. Madhavrav, who is known as Thorale or Great Madhavrav, is entitled to special praise for his support of the weak against the oppressive, of the poor against the rich, and, so far as the constitution of society admitted, for his justness. Madhavrav started nothing new. He improved the existing system, tried to cure defects without changing forms, and restrained a corruption which he could not remove. The efficiency of his early government was clogged rather than aided by the abilities of Sakharam Bapu. The old minister's influence was too great for his young master's talents. All useful acts were set down to Sakharam Bapu and all that was unpleasant to Madhavrav, an allotment of praise and blame, which Madhavrav's irritable and ungoverned temper seemed to justify. When, shortly after Raghunathrav's confinement (1768), Madhavrav removed Sakharam, he allowed Moroba his successor to do nothing without his orders, and established a system of intelligence which gave him prompt and exact information regarding both domestic and foreign events.

For some time before Madhavrav's death Raghunathrav's confinement had been much relaxed. As his nephew's health declined, Raghunathrav opened intrigues with Haidar Ali and the Nizam to obtain his freedom and secure his succession as Peshwa. During Madhavrav's last illness the ministers intercepted the correspondence. Nineteen

persons were sent to hill forts, and Raghunathrav's confinement would have become stricter than ever, had not Madhavray, feeling that death was near, interposed, observing that it was natural for his uncle to desire his liberty. His sound discrimination showed him that his brother would fail to conduct the administration if Raghunathray were neither effectually restrained nor conciliated. Judging conciliation better than restraint, ho appointed Raghunathrav's friend Sakharam Bapu minister, and summoned Raghunathrav to Theur and there solemnly placed his younger brother Narayanrav under Raghunathrav's charge. Shortly before Madhavrav's death Mr. Thomas Mostyn, of the Bombay Civil Service, came to live at Poona as an envoy of the British Government. [Grant Duffs Marathas, 371. The appointment of envoy was made under instructions from the Court of Directors. The object of the appointment nominally was to keep the different Presidencies informed of the movements and intentions of the Marathas. The real object of the mission was to obtain the cession of Salsette and the islands of the Bombay harbour.]

Narayanrav Ballal, Fifth Peshwa, 1772-1773.

In December 1772 Narayanrav, the third of Balaji Bajirav's sons, then seventeen years old went to Satara and was invested as Peshwa. Sakharam Bapu received the robes of prime minister under the name of karbhari, Bajaba Purandhare was appointed minister or divan, and Nana Fadnavis was appointed recorder or fadnavis The first object of the new administration was the reduction of Raygad in Kolaba (1773) which was held by the Moghals. Grant Duff's Marathas, 369.1 Narayanrav and Raghunathrav for some time continued in apparent friendship. But the old hatred between Narayanrav's mother Gopikabai and Raghunathray's wife Anandibai, and the jealousy of the Brahman ministers soon produced discord, and, on the 11th of April 1773, Raghunathray was confined in a room in the palace in which Naravanray usually lived when at Poona. Nana Fadnayis stood high in Narayanrav's favour, but Bajaba Purandharo and Haripant Phadke were his chief confidents. The conduct of the leading affairs of state nominally continued with Sakharam Bapu, but the favourites were opposed to his power. Narayanray, who had a longing for military fame, looked forward with eagerness to the next season's campaign in the Karnatak, Troops were told to be in readiness, and orders were despatched to recall the armies from North India. On the morning of the 30th of August a commotion broke out among the Peshwa's regular infantry in Poona. Towards noon the disturbance so greatly increased that Narayanrav, before going to dine, told Haripant Phadke to restore order. Haripant neglected these instructions and went to

dine with a friend. In the afternoon, Narayanrav, who had retired to rest, was wakened by a tumult in the palace, where a large body of infantry, led by two men named Sumersing and Muhammad Yusuf, were demanding arrears of pay. Kharaksing who commanded the palace guard joined the rioters. Instead of entering the open main gate, they made their way through an unfinished door on the east side, which, together with the wall round the palace, had shortly before been pulled down to make an entrance distinct from the entrance to Raghunathrav's quarter.

Narayanrav Murdered, 30th August 1773.

On starting from sleep Narayanray, closely pursued by Sumersing, ran to his uncle's room. He threw himself into his uncle's arms, and called on him to save him. Raghunathrav begged Sumersing to spare his life. I have not gone thus far to ensure my own destruction replied Sumersing; let him go, or you shall die with him. Raghunathrav disengaged himself and got out on the terrace. Narayanrav attempted to follow him, but Tralia Povar an armed Maratha servant of Raghunathrav's, seized him by the leg, and pulled him down. As Narayanrav fell, Chapaji Tilekar, one of his own servants, came in, and though unarmed rushed to his master. Narayanrav clasped his arms round Chapaji's neck, and Sumersing and Tralia slew them both with their swords. Meanwhile the conspirators secured the whole of the outer wall of the palace. The tumult passed to the city, armed men thronged the streets, the shops were shut, and the townsmen ran to and fro in consternation. Sakharam Bapu went to the police magistrate's office and there heard that Raghunathrav had sent assurances to the people that all was guiet. Sakharam Bapu directed Haripant Phadke to write a note to Raghunathray. Raghunathray answered telling him that some soldiers had murdered his nephew. Haripant declared that Raghunathrav was the murderer and fled to Baramati, Sakharam Bapu told the people to go to their homes and that no one would harm them. On that night Bajaba Purandhare and Maloji Ghorpade had an interview with Raghunathray, and Trimbakray Mama bore off Narayanrav's body and burnt it. Visitors were received at the palace. Mr. Mostyn, the English envoy and the different agents paid their respects, but Raghunathrav remained in confinement, detained, as was said, by the conspirators as a security for the payment of their arrears. Raghunathrav was suspected, but there was no proof. He was known to have loved his nephew, and the ministers decided that, until the contrary was proved, Raghunathrav should be held innocent and be accepted as the new Peshwa. Ram Shastri approved of this decision. At the same time he made close inquiries.

After about six weeks he found a paper from Raghunathray to Sumersing, giving him authority to slay Narayanrav. Ram Shastri showed this paper to Raghunathray, who admitted that he had given an order, but persisted that his order was to seize Narayanray, not to slay him. Examination of the paper confirmed Raghunathrays statement, showing that the word dharave seize had been changed to marave kill. This change it was generally believed was the work of Anandibai Raghunathrav's wife; it was also balieved that it was under her orders that the servant Tralia Povar had taken part in Narayanrav's murder. When Raghunathrav confessed his share in Narayanrav's murder, he asked Ram Shastri what atonement he could make. The sacrifice of your life, replied the Shastri, is the only atonement. The Shastri refused to stay longer in Poona with Raghunathray at the head of affairs, left the city, and spent the rest of his life in retirement near Vai. Mean while the arrears of pay were discharged, Raghunathrav was released, and his adopted son Amritray, attended by Bajaba Purandhare, was sent to Satara to bring the robes of office.

Raghunathrav, Sixth Peshwa, 1773-1774.

Raghunathray was proclaimed Peshwa. Sakharam Bapu was confirmed as prime minister or karbhari; and Chinto Vithal and Sadashiv Ramchandra the son of Ramchandra Baba Shenvi were the most confidential of Raghunathray's advisers. Narayanray was murdered in his eighteenth year. His follies, which were the follies of a boy, have been blackened into crimes by the feelings and interests of his rivals. He was affectionate to his relations, kind to his servants, and loved by all but his enemies. By the end of the rainy season (November 1773) the Peshwa's army in North India under Visaji Krishna returned to Poona. They had defeated an attempt of the emperor Shah Alam II. to free himself from Maratha Control, and had greatly strengthened Maratha power at the Delhi court. [Grant Duffs Marathas, 363.] Haidar Ali of Maisur and Nizam Ali of Haidarabad lost little time in taking advantage of the disorders at Poona. Raghunathrav resolved to oppose Nizam Ali and cripple his power. It was when the army had marched and Raghunathrav was leaving Poona, that Ram Shastri produced the proof of Raghunathrav's knowledge of the plot against Narayanrav and stated that so long as Raghunathrav remained at the head of affairs he would never return to Poona. Though the other ministers did not openly withdraw from Raghunathravs support they soon became estranged from his councils, and Sadashiv Ramchandra, Chinto Vithal, A'baji Mahadev, and Sakharam Hari, the persons of whom he made choice, were ill qualified to supply their place. Sakharam Bapu and Nana Fadnavis on different pretences withdrew from the army and

returned to Poona. They were soon followed by Ganpatrav Rastia, Babaji Naik Baramatikar, [The nephew or grandson of Bapuji Naik Baramatikar, who was married to the aunt of Balaji Bajirav and who endeavoured with the support of Raghuji Bhonsla to purchase the office of Peshwa in 1740.] and several other persons of consequence. Except Bajaba Purandhare, Moroba Fadnavis was the last of Raghunathrav's minister to quit his camp. All but Raghunathrav and his dependents saw there was some scheme on foot. [Grant Duff's Marathas, 365.]

The leading members of the Poona ministry were Sakharam Bapu, Trimbakrav Mama, Nana and Moroba Fadnavis, Bajaba Purandhare, Anandrav Jivaji, and Haripant Phadke. All these men had been raised by the Peshwa's family and had no connection with Shivaji's and Shahu's eight ministers. The leaders of the ministry were Nana Fadnavis and Haripant Phadke. It was found that Gangabai Narayanrav's widow was pregnant, and it was determined that she should be taken for safety to Purandhar, and, according to some accounts, that other pregnant Brahman women should be sent with her that the risk of mishap might be avoided and the chance of Gangabai's child proving a girl be amended. On the morning of the 30th of January 1774, Nana Fadnavis and Haripant Phadke carried Gangabai from Poona to Purandhar. She was accompanied by Parvatibai, the widow of Sadashivrav, a lady held in high respect, and the reason of her removal was publicly announced.

Gangabai's Regency, 30th January 1774.

The ministers formed a regency under Gangabai and began to govern in her name. All the adherents of Raghunathray, who, by this time had advanced beyond Ballari, were thrown into confinement. Negotiations were opened with Nizam Ali and Sabaji Bhonsla, both of whom agreed to support Gangabai and a wide-spread intrigue in Raghunathrav's camp was organized by Krishnarav Balvant. When Raghunathrav heard of the revolt in Poona, with the Pant Pratinidhi and Murarrav Ghorpade, he began to march towards the Haripant Phadke came from Poona to meet him at the head of a division, while Trimabkrav Mama and Sabaji Bhonsla were advancing from Purinda. On the 4th of March 1774 Raghunathrav met and defeated the minister's troops under Haripant Phadke near Pandharpur in Sholapur. The news of this defeat filled Poona with alarm. The people packed their property and fled for safety to retired villages and hill forts. Instead of marching on Poona Raghunathray passed north to receive the aid of Holkar, Sindia, Gaikwar, and the English. On the 18th of April 1774, a son was born to Gangabai, Narayanrav's widow. In Grant Duff's opinion, notwithstanding the suspicious circumstances which formed part of the minister's scheme, there is little doubt that the child was the son of the murdered Narayanrav.

Madhavarao Narayan, Seventh Peshwa, 1774-1795.

The child was named Madhavrav Narayan, afterwards known as Savai Madhavrav. Gangabai sent Sakharam Bapu and Nana Fadnavis to receive her son's robes of investiture, which the Raja sent from Satara in charge of Nilkanthrav Purandhare. The infant Madhavrav was formally installed Peshwa when he was forty days old. [Grant Duffs Marathas, 368.] Jealousy soon sprang up among the ministers. Nana Fadnavis was too cautious to take the lead and supported Sakharam Bapu as the head of the government. This conduct was as much due to timidity as to design. Sakharam Bapu was an old, cautious, timeserving courtier, but he was a man of much more courage than Nana, and, in his humble and assiduous colleague and adherent, he did not see a future rival and a powerful foe. So great was Sakharam Bapu's influence that his secession would have ruined the minister's cause. Nana's position was greatly they strengthened by Gangabai's passion for him. He could thoroughly trust her and teach her the best means of governing the old ministers. Nana's cousin Moroba, who had been Madhavray's ostensible prime minister, was dissatisfied to find that little deference was paid to his counsel. If he could have done it with safety and made sure of a future rise to power, he would readily have gone back to Raghunathray. Such of the other ministers as would not submit to Sakharam and Nana were soon united in common discontent. This split among the ministers became generally known by the discovery of a correspondence on the part of Moroba, Bajaba, and Bahaji Naik with Raghunathray. Letters intercepted by Haripant near Burhanpur showed that these three had formed a plan to secure Sakharam Bapu, Nana, Gangabai, and the infant Madhavray, all of whom, during the rains, to escape the chill damps of Purandhar, had come to live in Sasvad. They heard of this conspiracy on the 30th of June, and with undissembled panic fled to the fort. The discovery of their plot defeated the designs of the feeble triumvirate. The ministers sentagents through the country to blacken the crimes of Raghunathrav and hold forth on the justice of the ministers' cause. At the same time they breathed nothing but union and concord. They deter mined to gain Raghunathrav's absolute submission; and their active and judicious preparations for war showed that they understood the best means of ensuring peace. [Grant Duffs Marathas, 370.] When Raghunathrav passed north instead of marching on Poona he sent an

agent to the British resident with hurried and vague applications for aid in men and money. The British were willing to help him, but before any agreement could be made he had retired too far for communication from Poona. Negotiations were next opened with Mr. Gambier the English chief or civil governor of Surat. In the latter part of 1774 the ministers won both Sindia and Holkar to their side and sent an army of 80,000 men under Haripant Phadke to pursue Raghunathrav. In the beginning of 1775 Sakharam and Nana returned to Purandhar and from it transacted all affairs.

Treaty of Surat, 1775.

On the 6th of March 1775 Raghunathray entered into a treaty with the English, which is known as the treaty of Surat. [Under the treaty of Surat the Bombay Government engaged at once to send 600 European and 1000 Native troops with a due proportion of artillery to help Raghunathrav. They pledged themselves to make up the number to 700 or 800 europeans and 1700 sepoys, with gun-lascars, artificers, and pioneers, the whole amounting to 3000 men. Raghunathrav engaged on account of 2500 men to pay £150,000 (Rs. 1½ lakhs) a month with a proportionate increase or decrease according to the number of men supplied. As a security for the payment he made over temporarily the districts of Amod, Hansot, Balsar, and part of Anklesvar in Central Gujarat, and ceded in perpetuity Bassein with its dependencies, the island of Salsette, and the other islands; the districts of Jambusar and Olpad in Central Gujarat; and an assignment of Rs. 75,000 annually upon Anklesvar in Broach, the whole amounting to £192,500 (Rs. 19,25,000) a year. He engaged to procure the cession of the Gaikwar's share of the revenue of Broach, and to pay all expenses the Company might incur in obtaining possession of the specified cessions, which were to be considered as belonging to them from the date of the treaty. As Raghunathrav was destitute of other funds, he deposited jewels valued at upwards of £60,000 (Rs. 6 lakhs) as a security for the promised advance, pledging himself to redeem them. The protection of the Company's possessions in Bengal and those of their ally the Nawab of Arkot was also provided for; and all British ships or vessels sailing under the protection of the British flag which might have the misfortune line to be wrecked on the Maratha coast were to be given to the owners. Grant Duff's Marathas, 877. In 1803 the jewels were restored to Bajirav as a free gift from the Company, Ditto.] With their help he went to Cambay in Gujarat, and on the plain of Aras about ten miles east of Anand in Kaira, defeated Haripant Phadke and his adherent Fatehsing Gaikwar. This news caused the ministerial party great alarm Nizam Ali pressed them hard,

professed sympathy with Raghunathray, and doubts of the legitimacy of the young Madhavray, and, to remain guiet, received a grant of land worth £180,000 (Rs.18 lakhs) a year. The Maratha nobles had no dislike to Raghunathray, and, if the next campaign proved as successful as the last, would probably have made no objection to his being named regent of the young Madhavrav. Raghunathrav was disliked by many Poona Brahmans, even by those who did not believe he was a party to the murder of Narayanray. The bulk of the people seemed to have no stronger feeling against him than that he was unlucky. [Grant Duffs Marathas, 387.] The success which had attended the efforts of the English to help Raghunathray and the advantages the English had gained by their alliance were lost by the action of the lately arrived members of the Bengal Council, who, contrary to the opinion of the President, Mr. Hastings, declared the Bombay treaty with Ragunathrav impolitic, dangerous, unauthorised, and unjust, and. sent Colonel Upton to Poona to conclude a treaty between the ministers and the Bombay Government. [Grant Duff's Marathas, 390,391. This ill-judged interference strengthened the hands of the ministers at Purandhar and ultimately cemented the tottering Maratha confederacy under the administration of Nana Fadnavis. In December 1776 Sakharam Bapu received a letter from the Governor General stating that the Bombay Government had acted beyond their powers in going to war without the sanction of the Bengal Government, that they had been ordered to withdraw their troops, and that an envoy had been sent to conclude peace [Grant Duff's Marathas, 392.] Colonel Upton arrived at Purandhar on the 28th of December 1775 The ministers took full advantage of the power which the mistaken policy of the Bengal Government had placed in their hands. They assumed a high tone of demand and menace, which Colonel Upton judged to be firm and sincere. Colonel Upton though upright and moderate was-illqualified to conduct a negotiation with Maratha Brahmans. The ministers greatly extolled the just and honourable motives which had determined the great Governor of Calcutta to order peace to be concluded. But when Colonel Upton proposed that the English should keep Salsette and the islands in the Bombay harbour, the cession of Bassein which they had obtained in the late war together with the revenue of Broach, the ministers were astonished that a Government which had so justly condemned the war could be so ready to keep the fruits of it. Colonel Upton argued that, Salsette was taken possession of as a precautionary measure long deemed necessary to the safety of Bombay, and the prosperity of its commerce. But the ministers would listen to nothing. They had been put to immense expense by keeping armies idle at the wish of the Bengal Government, which, if they had not been interfered with, would have long since settled the whole

matter. They demanded the immediate surrender of Raghunathrav and the entire restoration of the territory occupied by the Bombay Government since the beginning of the war. If Raghunathrav was given up and all the territory restored, the ministers as a favour to the Governor General would pay £120,000 (Rs. 12 lakhs) to reimburse the East India Company for the expenses incurred by the Bombay Government. They seconded their arguments with threats, and mistook the mild remonstrances of the envoy for timidity. As Colonel Upton could not agree to these proposals on the 17th of February he wrote to the Governor General that he supposed negotiations were at an end. But almost immediately after they had carried their menaces to the highest pitch the ministers agreed to the greater part of Colonel Upton's original demands.

Treaty of Purandhar, 1776.

Before accounts and time to reach Calcutta that the negotiations were broken of the treaty of Purandhar was settled and signed on the 1st of March 1776. The chief provisions were that Salsette or a territory yielding £30,000 (Rs. 3,00,000), and Broach and territory worth £30 000 (Rs. 3,00,000)more should be left with the English and £120,000 (Rs. 12 lakhs) paid to them on account of war expenses that the treaty with Raghunathrav was annulled; that the English were to return to garrison and Raghunathrav's army be disbanded within a month; and that Raghunathrav was to get an establishment and live at Kopargaon on the Godavari. Grant Duffs Marathas, 393-394. The Peshwa's name was not mentioned in the treaty. The ministers Nana and Sakharam probably left out the name, that in case the child Madhavrav should die Gangabai might adopt another son. The Bombay Government still clung to Raghunathrav's cause and received him with 200 followers at Surat, where he appealed to the Directors and to the King. The ministers threatened war if Raghunathray's army was not disbanded. To this the Bombay Government paid no attention, and their position was strengthened by the arrival at Bombay on the 20th of August 1776 and again in November 1777, of despatches from the Court of Directors approving the Bombay treaty of Surat with Raghunathray, and censuring the great and unnecessary sacrifice of the Bengal treaty of Purandhar with the ministers. Though hostilities had ceased, peace was not established. [Grant Duff's Marathas, 396.] In October 1776 a man claiming to be Sadashiv Chimnaji, the leader of the Marathas at Panipat, with the support of the Bombay Government possessed himself of the greater part of the Konkan and seized the Bor pass and Rajmachi fort. Near Rajmachi he was attacked and defeated by a ministerial force, fled to Kolaba, was given up by Angria, and was

dragged to death at an elephant's foot in Poona. On the 11th of November Raghunathrav was allowed to live in Bombay and an allowance of £1000 (Rs. 10,000) a month was settled on him. Grant Duff's Marathas, 398. In November Colonel Upton was recalled from Poona and Mr. Mostvn was sent as envoy in his place. The Poona ministers next showed their dislike to the English by trying to establish their enemies the French in a position of power in Western India. At Poona an agent of France was received with distinction and Mr. Mostyn was treated with studied coldness. In the, middle of March 1777 several Frenchmen, who landed at Cheul in Kolaba went to Poona, and, early in May 1777, one of them St. Lubin was received in Poona as an ambassador from France. The port of Cheul was promised to the French and an agreement made for the introduction of troops and warlike supplies. [Account of Bombay (1781). St. Lubin had been in India before. Though he was not an ambassador, St. Lubin had authority from the French to find what advantage could be gained from an alliance with the Marathas. He offered Nana to bring 2500 Europeans and 10,000 disciplined sepoys, and abundance of war stores.] Though the treaty of Purandhar and the suppression of Sadashiv's rising had strengthened the ministers' government in the Deccan, in the Bombay Karnatak they had suffered several reverses from Haidar and the Kolhapur chief. In September 1777, Gangabai the infant Peshwa's mother died from a drug taken to conceal the effects of her intimacy with Nana Fadnavis. In October 1777, Mr. Hornby the Governor of Bombay reviewed the position of the Poona ministers, and showed how their difficulties were increased by Sindia's and Holkar's want of support, by the defection of other Maratha nobles, by Haidar's victories, and by Gangabai's death. [Grant Duff's Marathas, 404.] The effect of Mr. Hornby's minute must have been greatly increased at Calcutta by the length Which Nana's hate of the English carried him in his dealings with St. Lubin and by the Directors' despatch received in November 1777 Strongly censuring the Calcutta treaty of Purandhar, and, under suitable circumstances approving an alliance with Raghunathray. [Grant Duff's Marathas, 406.] Meanwhile (1778) at Poona dissensions among the misterial party increased. Nana Fadnavis despised the abilities of his cousin Moroba Fadnavis, but, with a Brahman's caution, he was at more pains to conceal his contempt than his enmity. Moroba was supported by all Raghunathravs partisans, particularly by Bajaba Purandhare, Sakharam Hari, Chinto Vithal, Vishnu Narhar, and lately by Tukoji Holkar. Still Nana was confident, a spirit which Mr. Mostyn believed was due to assurance of support from France. After the death of Gangabai, Sakharam began to be jealous of Nana and expressed a qualified approval of a plan to restore Raghunathray, and Moroba wrote to the Bombay Government

proposing the restoration, of Raghunathray. The Bombay Government, who from Nana's dealings with the French were satisfied that their safety depended on a change of ministry at Poona, agreed to restore Ragunathray, provided Sakharam Bapu, the chief authority in Poona, expressed his approval of the scheme in writing. The decision of the Bombay Government was approved by the Governor General. To help their plans and to counteract French designs in Western India, a force under Colonel Leslie was ordered to cross the continent, and place themselves under the orders of the Government of Bombay. [The force consisted of six battalions of sepoys, proportionate artillery, and some cavalry. Grant Duff's Marathas, 406. Sakharam Bapu refused to record in writing his approval of the plan to restore Raghunathrav and further action was stopped. At Poona Nana attempted but failed to seize Moroba. In spite of this failure, with the help of Sakharam Bapu and with the offer of a position in the ministry, Nana succeeded in inducing Moroba to join his party. The effect of this change was at first a loss to Nana. Moroba, with the help of Holkar's troops, was more powerful than Nana, who retired to Purandhar and agreed to the plan for bringing Raghunathray to Poona provided no harm should come to himself or his property But Nana, by reminding Sakharam Bapu of the evil results of Raghunathray's former term of rule at Poona, persuaded Sakharam Bapu and through Sakharam Bapu persuaded Moroba to give up the idea of bringing Raghunathrav back. The enjoyment of power under the existing arrangement and Nana's persuasion led Moroba still further to adopt Nana's views and favour St. Lubin and French alliance.

The Bombay Government remonstrated with the ministers for keeping St. Lubin in favour in Poona. Nana saw that the English would not stand further friendship between the French and the Marathas. He accordingly dismissed St. Lubin in July, and granted passports for the Bengal troops through Maratha territory on their way across India to counteract French influence in Western India. While dismissing St. Lubin, Nana assured him that if St. Lubin could bring a French corps to India he would grant the French an establishment in Maratha territories; and, while granting passports to the British for safe conduct through Maratha territory, Nana was sending secret orders to the Maratha officers and to the Bundelkhand chief to do what they could to stop the English. [Grant Duff's Marathas, 409-410.]

Nana Fadnavis, 1778.

Nana allowed Moroba to remain in power for about a year. On the 8th of June 1778 Haripant Phadke and Mahadji Sindia joined Nana at

Purandhar and a bribe of £90,000 (Rs. 9 lakhs) removed the source of Moroba's strength by the transfer of Holkar from Moroba's interests to the interests of Nina. [Grant Duff's Marathas, 408.] On the 11th of July 1778, Moroba was seized by a party of Sindia's horse, made over to Nana, and placed in confinement. The whole of Moroba's party were arrested except Sakharam Bapu, who, for the sake of the Purandhar treaty, had to be left at liberty. Grant Duff's Marathas, 401. Among the better type of Marathas who devoted their lives to the attempt to place at the head of the state the generous soldier Raghunathray, instead of Nana the scheming and cowardly courtier, was a Kayastha Prabhu named Sakharara Hari. Sakharam, who had spent his life in Raghunathrav's service and never wavered from his master's interest, was arrested with others of Moroba's party. He was chained in irons so heavy that, though a man of unusual strength he could hardly lift them. His allowance of food and water was slow starvation. Still at the end of fourteen months when too weak to rise, his spirit and his love for his master remained unshaken. My strength is gone, my life is going, when voice and breath fail my bones shall shout Raghunathray, Raghunathray. In spite of Nana's triumph, the Bombay Government resolved to continue their efforts to place Ragunathray in the regency, and directed Colonel Leslie to march on Junnar. At Poona, Nana Fadnavis on the plea of age, removed Sakharam Bapu from the administration, and placed a body of Sindia's troops over his person and house. Self-mounted horsemen or shiledars were recruited all over the country and ordered to assemble at the Dasara festival in October. In the different ports vessels were refitted, forts were provisioned and repaired, fresh instructions were despatched to harass Leslie's march, and an agent was sent to Bombay to amuse the Government by making overtures to Raghunathrav. This last deception failed, as the Bombay Government knew from Mr. Lewis what was going on in Poona.

English Expedition, 1778.

On the 22nd of November 1778, under agreement with Raghunathrav, an advanced party of British troops under Captain James Stewart, consisting of six companies of native grenadiers from different corps with a small detail of artillery, moved from the port of Apti in Kolaba, took possession of the Bor pass without opposition, and encamped at Khandala. The main force landed at Panvel in Thana on the 25th November, but from delay in making a road for the gnus up the Bor pass, they did not reach the top of the pass till the 23rd of December 1778. The force was under the command of Colonel Egerton and Mr. Carnac. It included 591 Europeans, 2278 Native Infantry and 500 gun

lascars. They were accompanied by Raghunathrav, his adopted son Amritrav, and a few horse. Some skirmishing had token place between Captain Stewart and small parties of the enemy, in which the British sepoys showed great zeal. At Khandala Colonel Egerton, the commanding officer, reserving the advance as a-separate corps under Captain Stewart, divided the main body of his force into two brigades, one commanded by Lieutenant Colonel Cay and the other by Lieutenant Colonel Cockburn. Through fairly level, though in places somewhat marshy land, these three divisions advanced at the rate of about three-quarters of a mile a day, one division always occupying the ground which the other had quitted. In this way eleven days passed before they reached Karla a village eight miles from the ground which Captain Stewart had occupied about six weeks before.

Vadgaon, 1778.

The extraordinary slowness of this march encouraged the enemy's advance guard, which under Bhivray Yashvant Panse brought infantry, rockets and guns to harass them, but on every occasion were attacked and driven back with the greatest spirit. During the march from Khandala the army lost Lieutenant Colonel Cay an excellent officer, who was mortally wounded by a rocket on the 31st of December. A still more serious loss was at Karla, on the 4th of January 1779, the death of Captain Stewart the leader of the advance, a true soldier active gallant and judicious, whose distinguished courage so impressed the Marathas that for years he was remembered as Stewart Phakde or Hero Stewart. This creeping advance of the Bombay army gave Nana Fadnavis and Mahadji Sindia ample time to gather their forces. As the chief signer of the Purandhar treaty Sakharam Bapu could not well be longer kept under restraint, and, after a formal reconciliation, he nominally returned to his office of minister. Nana's military leaders were Mahadji Sindia, Haripant Phadke, and Tukoji Holkar. But, as in spite of his bribe of £90,000 (Rs. 9 lakhs), Nana mistrusted Holkar, he was kept in a position from which it was almost impossible for him to join Raghunathray. As the English drew near, the Maratha army advanced to Talegaon about twenty miles east of Khandala and eighteen miles west of Poona. On the 6th of January 1779, ill health forced Colonel Egerton to resign the command to Colonel Cockburn. Colonel Egerton started for Bombay, but as the Marathas had cut off communications he was forced to return to the army where he continued a member of the committee. On the 9th of January 1779, when the Bombay army reached Talegaon, the Marathas retired. The village was found to be burnt, and it was said that if the Bombay army advanced further Chinchwad and Poona would also be burnt. Though

they were within eighteen miles of Poona and had stores and provisions for eighteen days the Committee, that is apparently Mr. Carnac, scared by the union and the determination of the Marathas proposed a retreat. In vain Raghunathray, who had once led 50,000 of his countrymen from the Narbada to the Attok, pleaded for an action, one success would bring forward numbers of his partisans; in vain Mr. Reid, Mr. Mostyn's assistant stated that a party of horse in Moroba's interest were on their way from the Konkan; in vain Colonel Cockburn engaged to take the army to Poona and Captain Hartley and Mr. Holmes argued that if an advance was impossible negotiations should at least be begun before a retreat was ordered. The committee had determined to retreat and did not delay one day. At eleven on the night of the 11th of January the heavy guns were thrown into a pond, stores were burnt, and 2600 British troops began to retreat before 50,000 Marathas. [Grant Duff's Marathas, 415, Mr. Lewis estimated] the Maratha force at 35,000; the Marathas at 100,000; Colonel Cockburn at 120,000; Grant Duff at 60,000. The Committee imagined their retreat would remain unknown. By two next morning, within three hours of their start, a party of Marathas fired on the advanced guard; shortly after the rear also was attacked and the baggage plundered; at daybreak the army was surrounded and large bodies of horse were coming to the attack. The weight of the assault fell on the rear, composed of Hero Stewart's six companies of grenadiers and two guns now under the command of Captain Hartley a distinguished officer and well known to the men. Shortly after sunrise the rear was again attacked by the main body of the Marathas, horse foot and guns. The sepoys fought with enthusiasm, the red wall, as Sindia said, building itself up again as soon as it was thrown down. [Grant Duff's Marathas, 425.] Five companies of Europeans and two companies of sepoys were sent to support Captain Hartley, who, in spite of constant attacks, continued till noon to keep the Maratha force at bay. During the whole of the morning the main body of the army were engaged in returning the fire of the Maratha artillery and suffered little loss. About noon Major Frederick was sent to take the command in the rear. About an hour after Major Frederick was ordered to retire on the main body and the whole force moved to the village of Vadgaon where the advance guard was posted. Crowds of followers pressed in and the entrance into Vadgaon was a scene of confusion and loss. At last the troops cleared themselves, drove off the Maratha horse, got guns into position, and by four in the afternoon the army had some respite. Early next morning (13th January 1779) the enemy's guns opened on the village and a body of infantry advanced to attack it. They were repulsed, but a feeling spread among some of the officers that the men were dispirited and were ready to desert. The commander's

example encouraged this feeling. A further retreat was deemed impracticable, and Mr. Farmer the secretary of the committee was sent to negotiate with the ministers. [The English loss on the 12th January was fifty-six killed, 151 wounded, 155 missing. Of the killed and wounded fifteen were European officers. Grant Duffs Marathas, 417.] The ministers demanded Raghunathray, but the committee were saved the disgrace of surrendering him, by Raghunathrav's agreeing to give himself up to Sindia. The ministers, that is Nana and Sindia who between them held the real power, insisted that the committee should agree to surrender all the territory which the Bombay Government had acquired since the death of Madhavrav Ballal (1772), together with the Company's revenue in Broach and Surat which the Marathas had never possessed. When these terms were laid before the committee Captain Hartley pleaded that one more effort might be made to retreat but his proposal was rejected. A message was sent to the ministers that the committee had no power to enter into any treaty without the sanction of the Bombay Government. Still Mr. Carnac immediately after sent Mr. Holmes to Sindia with full power to conclude a treaty. Sindia, though highly flattered by this direct negotiation, gave in nothing from the Maratha demands, and Mr. Holmes had to agree that everything should be restored to the Marathas as in 1772 and that a message should be sent to stop the advance of the Bengal troops. Sindia's favour was purchased by a private promise to bestow on him the English share of Broach and by the gift of £4100 (Rs. 41,000) to his servants. The Bombay army, after leaving Mr. Farmer and Colonel Stewart as hostages, were allowed to withdraw.

Mr. Carnac's first act on reaching the Konkan was to suspend his order stopping the advance of the Bengal troops. [Grant Duff's Marathas, 418.] When news of the disgrace at Vadgaon reached Bombay Mr. Hornby disavowed Mr. Carnac's power to make a treaty. On the 19th of February he proposed to the council that their object should be to secure peace so as to exclude the French from the Maratha dominions and to prevent the cession of English territory. He thought the £4100 (Rs. 41,000) spent in presents to Sindia's servants should be paid and the promise of the grant of Broach to Sindia confirmed. [Grant Duff's Marathas, 420.]

Goddard's March 1779.

The position of the English which was almost ruined by the disaster at Vadgaon was retrieved by the success of Goddard's march. On hearing that the Bombay army had suffered a defeat at Vadgaon, Goddard pressed on with speed from Rajegad in Bundelkhand and reached

Surat on the 25th of February 1779. [Goddard's route lay through Multan, Khemlassa, Bhilsa, Bhopal, and Burhanpur. After refreshing his army at Burhanpur he resumed his march the 6th of February, and, in twenty days, reached Surat a distance of 300 miles. When news of Vadgaon reached the supreme Government they ordered Goddard, whom they had already appointed their plenipotentiary, to conclude a treaty with the Marathas. The new treaty was to be on the basis of the Purandhar treaty with an additional articles excluding the French from any establishment in Maratha territory, Goddard was also, if he gained the opportunity, to come to a separate arrangement with Sindia. [Grant Duff's Marathas, 424.] Sindia who continued to keep Raghunathrav in his power arranged that lands worth £1,200,000 (Rs. 1,20,00,000) a year should be settled on Raghunathray in Bundelkhand. On his way to Bundelkhand Raghunathrav escape from his guard and reached Surat where he prayed General Goddard to give him shelter. Goddard agreed to shelter him (12th June 1779) and gave him an allowance of £5000 (Rs. 50,000) a month The escape of Raghunathrav caused some coldness between Nana and Sindia. This passed off and Holkar and Sindia with 15,000 horse agreed to oppose Goddard in Gujarat. [Grant Duff's Marathas, 431.]

When the rains of 1779 were over, as the Marathas refused to come to terms, troops were sent from Bombay and overran North Thana and secured the revenue. On the 1st of January 1780 Goddard marched south from Surat to act with the Bombay troops. In December 1780 he captured Bassein, while Hartley defeated the Marathas with heavy loss at the battle of Dugad about twenty miles north of Thana. After these successes in the Konkan, in the hope that a display of vigour would bring Nana to terms, Goddard advanced and took the Bor pass on the 1st of February 1781. Goddard kept his head-quarters at Khopivli or Kampoli at the foot of the pass and sent proposals to Nana. Nana who was busy collecting troops negotiated for a time, and, when his preparations were ready, returned Goddard's proposals on the ground that no terms could be considered which did not provide for the safety of the Marathas' ally Haidar of Maisur. On the 15th of April Goddard began to retreat on Bombay. From the first he was sorely pressed by the Marathas. Only his skill as a general and the courage of his troops enabled him on the 23rd of April to bring them safely to Panvel. The Marathas considered this retreat of Goddard's one of their greatest successes over the English. In September 1781 Lord Macartney, Sir Eyre Coote, Sir Edward Hughes, and Mr. McPherson addressed a joint letter to the Peshwa stating their wish for peace, the moderation of the Company's views, the desire of the British nation to conclude a firm and lasting treaty which no servant of the Company should have

power to break, and assuring the Peshwa that satisfaction should be given in a sincere and irrevocable treaty. General Goddard, who still considered himself the accredited agent on the part of the supreme Government, also opened a negotiation, and assumed, what was privately agreed, that Sindia should use his endeavour to obtain a cessation of hostilities between the Peshwa and the English until the terms of a general peace could be adjusted. In January 1782 the Bombay Government sent Captain Watherstone to Poona, but shortly after his arrival official intelligence was received that Mr. David Anderson had been deputed to Mahadji Sindia's camp, as Agent of the Governor General with full powers to negotiate and conclude a treaty with the Marathas. On this Captain Watherstone was recalled.

Treaty Salbai, 1782.

At last on the 17th of May the treaty of Salbai was concluded and ratified by the Peshwa on the 20th of December 1782. Grant Duff's Marathas, 452.] Its chief provisions were that Raghunathray should have £2500 (Rs. 25,000) a month and live where he chose; that all territory should remain as before the treaty of Purandhar; that all Europeans except the Portuguese should be excluded from the Maratha dominions; that Haidar should be compelled to relinquish his conquests from the English; and that Broach should be given to Sindia for his humanity to the English after the convention of Vadgaon. Raghunathrav accepted the terms of the treaty and fixed his residence at Kopargaon on the Godavari in Ahmadnagar. He survived only a few months. His widow Anandibai shortly after gave birth to a son Chimnaji Apa. The infant Chimnaji together with Bajirav, who at the time of his father's death was nine years old, remained at Kopargaon till 1793 when Nana Fadnavis removed them to Junnar. [Grant Duff's Marathas, 459, 520.]

In 1784, a conspiracy formed with the object of deposing Madhavrav Narayan and raising Bajirav, the son of the late Raghunathrav was discovered and crushed by Nana. In the same year Mudaji Bhonsla the chief of Berar visited Poona. He showed a sincere desire to connect himself with the head of the state, and, in the name of his son Raghuji, entered on a new agreement pledging himself never to assist the English against the Peshwa's Government and promising to cooperate in the expected war with Tipu. One effect of the treaty of Salbai was greatly to favour Sindia's desire to form an independent Maratha dominion. In 1784 he took Gwalior from the Rana of Gohad who had forfeited his claim to British protection; he obtained supreme authority at Delhi; he was appointed commander-in-chief of the

Moghal forces and manager of the provinces of Delhi and Agra; and made a claim on the British for *chauth* for their Bengal provinces which was disavowed by Mr. McPherson. In 1785 the news of Sindia's saccess in Northern India was received at Poona with surprise and joy. A small body of the Peshwa's troops was sent to join him as a measure of policy to preserve the appearance of the Peshwa's co-operation and supremacy. In the same year at Nana's desire Mr. Charles Malet was chosen to be British resident at Poona.

In December 1789, on hearing of Tipu's movements, Nana Fadnavis made specific proposals to the Governor General in the name both of his master and of Nizam Ali. These proposals with slight modifications were accepted. A preliminary agreement was settled on the 29th of March 1790, and, on the 1st of June, for the suppression of Tipu an offensive and defensive treaty was concluded at Poona between Mr. Malet on the part of the Company and Nana Fadnavis on the part of the Peshwa and Nizam Ali. Grant Duff's Marathas, 484.

Sindia in Poona, 1792.

In 1792 Sindia, who was supreme at the Dehli Court, marched from the north towards Poona bearing from the Emperor of Delhi to the Peshwa the deeds and robes of the hereditary office of Vakil-i-Mutlak or Chief Minister, whose hereditary deputy in North India was to be Sindia. Nana Fadnavis applied to the English for the permanent services of Captain Little's Detachment which had acted with Parashuram Bhau in the war in the Karnatak in 1790 and 1791. This proposal was not agreed to. Sindia, afraid that Nana might enter into some such arrangement with the English, and to, allay Nana's wellfounded jealousy of his regular infantry, brought with him only a small party under an Englishman named Hessing and a complete battalion commanded by Michael Filoze and Neapolitan. Sindia reached Poona on the 11th of June and pitched his camp near the Sangam or meeting of the Mutha and Mula rivers, the place assigned by the Peshwa for the residence of the British envoy and his suite. Nana, who was jealous of Sindia, did all he could to prevent the Peshwa's accepting the titles and insignia brought from the emperor. He represented the impropriety of adopting some of the titles, especially that of Maharaj Adhraj, the greatest of great rajas, which was inconsistent with the constitution of the Maratha empire. Still Sindia persisted and the Raja of Satara gave the Peshwa leave to accept the honours. Nine days after his arrival, Nana visited Sindia who received him in the most cordial manner, refused to sit on his state cushion in the minister's presence, and treated him with the greatest respect. Next day Sindia paid his

respects to the Peshwa, carrying with him numberless rarities from North India. The following morning was fixed for the ceremony of investing the young Peshwa with the title and dignity of Vakil-i-Mutlak. Sindia spared no pains to make the investiture imposing. Poona had never seen so grand a display. The investiture of Sindia as the Peshwa's deputy in the office of Vakil-i-Mutlak filled the next day. In spite of the outward success of these ceremonies the Marathas and Brahmans of Poona and the Deccan remained unfriendly to Sindia. Sindia hoped by the magnificence of his presents to gain the goodwill of the Peshwa. He also, in contrast to Nana's strictness and decorum, took pains to please the Peshwa, making hunting and water parties for his amusement. These efforts of Sindia's had so much success that Nana in an interview with the Peshwa, after reminding him what services he had rendered, warned him of the danger he ran if he put himself in Sindia's hands, and asked leave to retire to Benares. Madhavrav was much affected and promised that nothing would persuade him to desert Nana for Sindia. So bitter was the feeling between Nana and Sindia that disputes nearly ended in an outbreak. This danger was removed by the death of Mahadji Sindia of fever after a few days' illness at Vanavdi about two miles east of Poona on the 12th of February 1794. Grant Duff's Marathas, 503. Mahadji Sindia's career had been most eventful. He was the chief Maratha leader for about thirty-five years, he mediated between the Peshwa and the English, and he ruled the puppet emperor of Delhi with a rod of iron. He was succeeded by his grand nephew Daulatrav Sindia, then in his fifteenth year. Nana Fadnavis was now the only Maratha statesman. The Maratha confederacy still maintained the nominal supremacy of the Peshwa; hut the people were losing their adventurous spirit and each chiettain was gradually becoming independent of any central authority. Between Sindia's death in February 1794 and the close of the year the progress of events was in Nana's favour. But the disputes between him and Nizam Ali regarding arrears of tribute grew more and more complicated. Sir John Shore would not interfere and war was begun in 1794. For the last time all the great Maratha chiefs served together under the Peshwa's banner. Daulatrav Sindia Mahadji's successor, and Tukoji Holkar were already at Poona, and the Raja of Berar had set out to join; Govindrav Gaikwar sent a detachment of his troops; the great southern vassals the Brahman families of Patvardhan and Rastia, the Brahman holders of Malegaon and Vinchur, the Pratinidhi, the Pantsachiv, the Maratha Mankaris, Nimbalkar, Ghatge, Chavhan, Dafle, Povar, Thorat, and Patankar with many others attended the summons. The Peshwa left Poona in January 1795, and the great Maratha army marched at the same time, but by different routes for the convenience of forage. The army included upwards of

130,000 horse and foot, exclusive of 10,000 Pendharis. [Of this force upwards of one-half were either paid by the Peshwa's treasury, or were troops of vassals under his direct control. Daulatrav Sindia's force was more numerous and more efficient than that of any other chieftain, although the greater part of his army remained in North India and Malwa. Jivba Dada Bakshi commanded Immediately under Daulatrav and had lately joined him with a reinforcement. The whole consisted of 25,000 men, of whom 10,000 were regular infantry under De Boing's second-in-command M. Perron. Raghuji Bhonsla mustered 15,000 horse and foot, Tukoji Holkar had only 10,000, but of these 2000 were regulars under Dudrenec and most of the Pendharis were followers of Holkar Parashuram Bhau].

Nana's Triumph, 1795.

Nana Fadnavis consulted the chief officers separately, and seems to have adopted the plans of Jivba Dada Bakshi the Shenvi commander of Sindia's troops, and of Tukoji Holkar. He appointed Parshuram Bhau to act as commander-in-chief. The war ended on the 11th of March by the defeat of the Moghals at Kharda in the Jamkhed sub-division of Ahmadnagar, a defeat due more to Moghal panic than to Maratha bravery. Nizam Ali was obliged to treat and surrender an obnoxious minister Mashir-ul-Mulk, who had resisted the Maratha claims. After the battle the Peshwa returned to Poona; Nana Fadnavis was employed in distributing the acquisitions and in settling affairs with the different chiefs; Parshuram Bhau and Raghuji Bhonsla remained near Poona; Holkar encamped at Jejuri about twenty-five miles south-east of Poona; and Sindia at Jamgaon in Ahmadnagar. By the middle of September 1795 Daulatrav Sindia had taken leave of the Peshwa and gone to Jamgaon on his way to Hindustan; Parashuram Bhau had returned to Tasgaon in Satara; Holkar remained at Poona; and Raghuji Bhonsla left Poona at the middle of October being dismissed with great honour. Nana Fadnavis was at the height of his prosperity. Without calling the help of any foreign power he had gained every object of his ambition. Daulatrav Sindia was well disposed towards him and Sindia's ministers and officers were more intent on forwarding their own views in the government of their young master than in schemes for controlling the Poona Court. Tukoji Holkar had become imbecile both in mind and body and his officers were in Nana's hands. Raghuji Bhonsla was completely secured in his interests, and the Brahman estateholders were of his party. The fair prospect that the Peshwa's Government would regain the tone and vigour of the first Madhavrav's time (1761 -1772) was ruined by Nana's fondness for power. His unwillingness to let even his master share with him the control of the

state brought on Nana a catastrophe which undermined his authority, overturned the labour of his life, and clouded his last days with trouble and misery. [Grant Duff's Marathas, 518.]

Madhavrav, 1795.

Though Madhavrav was now (1795) twenty years old, Nana loosened none of the restraints under which he had been reared. At the same time he became more than ever watchful of all the state prisoners whose liberty migh to endanger his own power. In 1794, before the beginning of the war with Nizam Ali, Bajirav and Chimnaji Apa, the sons of Raghunathray, with their adopted brother Amritray were taken from Nasik to the *qadhi* or mud fort of Junnar and were kept there in close custody. The bulk of the people thought the imprisonment of these youths harsh, cruel, and unneeded. The old partisans of Raghunathray and all who disliked Nana strove to strengthen and embitter this feeling, praising the youths and overdrawing the harshness of their confinement. The knowledge how widely this feeling was spread made Nana still warier and more careful. He felt that Bajiray, the elder brother, though a youth of only nineteen, was a rival whom he had reason to fear. Graceful and handsome, with a mild persuasive manner, Bajirav was famed for skill as a horseman, archer, and swordsman, and for a knowledge of the sacred books greater than any Maratha Brahman of his age had ever been known to possess. Madhavrav heard with delight these accounts of his cousin's skill, and prayed that he might be set free and become his friend.

Bajirav, 1795.

In vain Nana warned him that Bajirav was no friend to him but a rival. The more Nana warned and lectured the stronger grew Madhavrav's longing to know his cousin. Bajirav heard that Madhavrav loved him and was anxious that Bajirav should be set free. Through his keeper Balvantrav, whom after long persuasion he at last won over, Bajirav sent Madhavrav a message of respect and sympathy: We are both prisoners, you at Poona and I at Junnar, still our minds and affections are free and should be devoted to each other; the time will come when we two together will rival the deeds of our forefathers. When Nana heard of this correspondence which had lasted for some time he showed an altogether unusual rage. He upbraided Madhavrav, doubled the closeness of Bajirav's confinement, and threw Balvantrav into a fort loaded with irons. Madhavrav galled by restraint and overwhelmed with anger and grief for days refused to leave his room. At the *Dasara*

on the 22nd of October, he appeared among his troops and in the evening received his chiefs and the ambassadors.

Madhavrav Dies, 1795.

But his spirit was wounded to despair, a melancholy seized him, and, on the morning of the 25th of October 1795, he threw himself from a terrace in his palace, broke two of his limbs, and died after two days, having particularly desired that Bajirav should succeed him. When he heard that Madhavrav had thrown himself from the terrace and was dying, Nana summoned Parashuram Bhau, recalled Raghuji Bhonsla and Daulatray Sindia, and called in Tukoji Holkar who was in Poona. He hid from them Madhavrav's dying wish that Bajirav should succeed him, and warned theny that Bajirays succession would be certain ruin to any one who had sided against Raghunathray. He enlarged on the family connection between Bajirav and the English; his accession would end in the English ascendancy; why not continue the prosperous government which the Deccan had for years enjoyed. He proposed that Madhavrav's widow Yashodabai should adopt a son and that Nana should conduct the government till the son came of age Holkar gave this scheme his support, and by January (1796) the leading nobles had agreed to it and withdrawn from Poona. This decision was told to Mr. Mallet. The English could raise no objection and nothing remained but to choose the child. Bajiray was informed of these measures. He knew that Baloba Tatya one of Sindia's officers was well disposed to him; he heard that on his death-bed Jivba Dada Bakshi, Sindia's prime minister, told his master that he was ashamed that he had agreed to keep Bajirav from his rights, and he promised Sindia territory worth £40,000 (Rs. 4 lakhs) if he would help him to become Peshwa. Sindia promised and a formal agreement was drawn up. When Nana heard of the agreement between Bajirav and Sindia, he sent in haste for Parashuram Bhau who marched from Tasqaon in Satara to Poona, 120 miles in forty-eight hours. Nana and Parashuram Bhau agreed that their only chance was to be before Sindia and at once offer the Peshwaship to Bajiray. Parashuram Bhau started for Junnar and made the offer. When Parashuram Bhau had held a cow by the tail and sworn by the Godavari, Bajirav was satisfied and went with him to Poona. As soon as Bajirav reached Poona he had a meeting with Nana Bajiray, assured of the succession, agreed to keep Nana at the head of his administration, and both promised to bury former enmity. When Baloba Tatya and his master Sindia heard that Bajiray had deserted them in favour of Nana they marched on Poona with a large force. The timid Nana was dismayed and told Parashuram Bhau that as it was against him that Sindia was coming he had better retire. Nana

accordingly withdrew to Purandhar and then to Satara. When Sindia reached Poona he had a friendly meeting with Bajirav. But his minister Baloba Tatya could not forgive Bajirav's desertion. He proposed that Madhavrav's widow should adopt Bajirav's younger brother Chimnaji, and that Parashuram Bhau should be prime minister. Parashuram Bhau consulted Nana, and Nana said the scheme was good, provided Parashuram Bhau got Bajirav into his hands. Parashuram Bhau overlooked this condition and told Baloba that his scheme had Nana's approval. Baloba expressed himself pleased as he feared that Nana might organize a combination against his master. Nana obtained the robe of investiture from the Satara chief and was on his way with it to Poona when he heard that Parashuram Bhau had not secured possession of Bajiray. He suspected treachery, sent on the robe, and halted at Vai in Satara During all this time Bajirav knew nothing of the plot to pass him over in his brother's favour. To settle some dispute, regarding certain arrears of pay he had promised to make good to Sindia, Bajirav went to Sindia's camp. Towards evening confused news came that Parashuram Bhau had seized Chimnaji and carried him of Bajirav was keen for pursuit; but no one knew where the boy had been taken and till morning pursuit was useless. Bajirav stayed the night in Sindia's camp. Next morning he saw the snare into which he had fallen when he was advised to remain with Sindia as no place outside of the camp was safe for him.

Chimnaji Madhavrav, Eighth Peshwa, May 1796.

Parashuram Bhau had taken Chimnaji to Poona and on the 26th of May 1796 contrary to his wish, Chimnaji was adopted by the name of Chimnaji Madhavrav and formally invested as Peshwa. The day after the new Peshwa was installed Parashuram Bhau proposed that Nana Fadnavis should come to Poona, be reconciled to Sindia's minister Baloba, and assume the civil administration, while the command of the troops should remain with Parashuram Bhau. In reply Nana Fadnayis requested that Parashuram Bhau's eldest son Haripant, might be sent to Vai to settle preliminaries. Instead of coming as an envoy, Haripant crossed the Nira at the head of 4000 to 5000 chosen horse. Nana's suspicions were strengthened by letter from Babarav Phadke advising him to lose no time in putting himself in a place of safety, and Nana retired to Mahad close to Raygad fort in Kolaba. Nana's fortunes now seemed desperate. But necessity forced him out of his timid and halfhearted measures. He exerted himself with a vigour of judgment, a richness of resource and a power of combining men, which from his European contemporaries gained him the name of the Maratha Machiavel. [Machiavel, a great Italian statesman.] Nana's two chief

enemies were Parashuram Bhau who was acting as minister at Poona and Baloba, Sindia's minister. His chief hope lay in persuading Bajirav, like himself a chief loser under the present arrangement, to throw in his lot with his.

Nana's Triumph, 1796.

In these extremities Nana's wealth, which he had been laying by for years and had placed with trusty bankers all over the country, was of the greatest service. Money could buy some leading man in the Peshwa's army to counteract Parashuram Bhau; money could buy a party in Sindia's camp to oppose Nana's other chief enemy Baloba; if only Bajirav were on his side promises of territory would win Sindia and the Nizam. Nana's negotiations with Bajirav were made easy by the arrival of a trusty dependent now in Bajirav's service bringing friendly assurances from Bajirav who urged Nana to exert himself as their cause was the same. Nana's schemes succeeded. He had Tukoji Holkar ready at a signal to help him with all his power. He won over Babarav Phadke who was in command of the Peshwa's household troops as a make-weight to Parashuram Bhau, and gained Sakharam Ghatge, whose daughter Sindia was most anxious to marry, an enemy of Baloba Sindia's minister. He offered Sindia Parashuram Bhau's estates in the Bombay Karnatak, the fort of Ahmadnagar, and territory worth £100,000 (Rs. 10 lakhs) on condition that he would place Baloba in confinement, establish Bajirav as Peshwa, and withdraw to North India. To these terms Sindia agreed. When Bajirav and Babarav Phadke, the commandant of the Peshwa's household troops knew that Sindia's alliance was secured, they began openly to collect troops with funds placed at their disposal by Nana. Baloba Tatya, Sindia's minister, found out that Bajirav and Babarav were raising troops. He seized and imprisoned Babarav in Chakan, surrounded Bajirav's encampment, and disbanded his troops. Baloba thought Bajirav was the root of the whole conspiracy, and arranged that he should be sent to North India under the charge of Sakharam Ghatge. On the way Bajirav used every endeavour to win over Ghatge, and, on the promise that Bajirav when he came to power would get him appointed Sindia's minister, Ghatge allowed Bajirav to halt on the plea of ill-health. Mashir-ul-Mulk, the Nizam's minister, whom he had lately freed from confinement in Poona was allowed by Parashuram Bhau to collect troops to be used against Nana. But Nana had already gained the Nizam and his vizier, promising, if the Nizam helped Bajiray to be Peshwa and Nana to be minister, that the lands won by the Marathas after the battle of Kharda (1795) should be restored to the Nizam and outstanding claims cancelled. On Dasara which fell on the 11th of October the regular

battalions in the Peshwa's service under Mr. Boyd marched to the Nira bridge and a brigade of Sindia's regulars started towards Raygad both apparently with the object of crushing Nana. Nana's plans were now complete. On the 27th of October. Sindia arrested his minister Baloba and sent a body of troops, accompanied by some of the Nizam's to seize Parashuram Bhau. Parashuram Bhau was warned and fled, taking Chimnaji Apa, but was pursued and captured. Bajirav was brought back and camped at Koregaon on the Bhima. Nana left Mahad, met the troops which he had collected at the Salpa pass in Satara and was joined by the Peshwa's infantry under Mr. Boyd. Before advancing Nana required a guarantee from Bajirav that no treachery was intended, and that if he ever wished he might resign his post as minister in the certainty that his person and property would be respected.

Nana Fadnavis resumed the duties of prime minister on the 25th of November and Bajirav was installed Peshwa on the 4th of December 1796. The Shastris declared Chimnaji's adoption illegal and after a nominal penance Chimnaji was appointed governor of Gujarat. [Grant Duff's Marathas, 527-529.] The English and Raghuji Bhonsla of Nagpur approved of Bajirav's accession. At the time of his accession Mr. Tone, who was then in Poona, described Bajirav as over middle size, fair, and graceful, with a manly sensible and majestic face and impressive manners.

Bajirav Raghunath, Ninth and last Peshwa, 1796-1817.

During these irregularities the army had fallen into disorder. In 1797 a desperate affray took place in the streets of Poona between a body of Arabs and a party of Mr. Boyd's sepoys, in which upwards of 100 persons were killed and many shops and warehouses were plundered. The treaties with Sindia and Raghuji Bhonsla were fulfilled, and Raghuji left for Nagpur. But as Bajirav, unless it was greatly modified, refused to ratify the treaty of Mahad with Nizam Ali, Mashir-ul-mulk quitted Poona without taking leave of the Peshwa and returned highly incensed to Haidarabad (13th July 1797). This dispute with the Nizam and the death of Tukoji Holkar in August 1797 considerably weakened Nana's power. On Holkar's death (13th July 1797) Malharray guarrelled with his brother Kashirav, who was imbecile in mind and body, and, with his two illegitimate brothers Yashvantray and Vithoji, removed, to Bhamburda, about two miles north-west of Poona city. Nana favoured Malharray, and Kashiray applied for help to Sindia. Sindia promised help with the greatest readiness, sent a strong force to Bhamburda, and, as Malharav refused to yield, his camp was

surrendered and he was killed. His half-brothers Yashvantray and Vithoji escaped. This success gave Sindia power over the whole of Holkar's resources and was a deathblow to the schemes of Nana Fadnavis, Bajirav secretly encouraged Sindia, who, in transferring Angria's estates in Kolaba from Manaji to his own relation Baburav and in other matters, began to exercise a more arbitrary power than the Peshwa had ever claimed. [Grant Duffs Marathas, 501.] Hither to Bajirav whose appearance and misfortunes always won sympathy was believed to have an excellent natural disposition. This belief was the result of his talent for cajoling and deceiving. From the beginning his conduct was governed by two principles to trust no one and to deceive every one. His great object was to free himself from the control of Sindia and of Nana. Sindia he regarded as a less evil than Nana. At the worst he thought that at any time he could get rid of Sindia by persuading him to go to North India. To free himself from Nana's control Bajirav entered into a plot with Ghatge, whose daughter was not yet married to Sindia, and persuaded him that so long as Nana remained in power Ghatge's hope of becoming Sindia's minister could never be realised. They agreed that Nana should be placed in confinement. On the 31st of December 1 797, Nana, while returning a formal visit to Sindia, was seized with, all his retinue; his quards were attacked and dispersed; and under Ghatge's orders Nana's, house and the houses of his adherents were plundered. Many resisted; firing went on for a night and day; the whole city was in an uproar; all went armed and in bands.

Nana Seized, 1797.

When Nana was seized in Sindia's camp, Bajirav, as if on business, sent for the leading members of Nana's party and put them in confinement. [See Mr. Uhtoff's Despatches.] Nana was sent to Ahmadnagar fort. Bajirav appointed his own half-brother Amritrav prime minister and raised the unexperienced Balaiipant Patyardhan to the command of the army. When as he supposed he had got rid of Nana's control, Bajiray began to devise means for dismissing Sindia. But he had first to carry out the promises he had made. Sindia was married to Ghatge's daughter, and money difficulties caused by marriage expenses and the cost of his army at Poona pressed hard on Sindia, so that he urged Bajirav to give him the £2,000,000 (Rs. 2) krors) he had promised. Bajirav said he had not the money. If Sindia would make Ghatge his minister, Bajirav would give Ghatge leave to recover from the rich people of Poona as much as was required. Sindia agreed and Ghatge was made minister and empowered to levy the amount required from the people of Poona.

Poona Plundered. 1797.

Ghatge's first step was to raise money from the members of Nana's party who were confined in Bajirav's palace. These men of high position and reputation were dragged out and scourged till they gave up their property. One of them, a relation of Nana's, was tied to a heated gun, and as he would not part with his property, remained tied to the gun till he died. These cruelties were not confined to Nana's friends. Merchants, bankers, and all in the city who were supposed to have wealth, were seized and tortured with such cruelty that several of them died. Though the plan of levying money by force from the people of Poona was Bajirav's, Bajirav never supposed that the money would be collected with such cruelty. He remonstrated with Sindia but his complaints were of no effect. Amritrav, Bajirav's brother, who did not know that Bajirav had any share in the matter proposed to seize Sindia. To this Bajirav willingly agreed. Before this Bajirav and Amritray, to make the Peshwa's infantry more nearly a match for Sindia's, had agreed to engage British officers and Mr. Tone was chosen to command the first brigade. Their relations with the Nizam were put forward as the reason for this increase of their troops and Sindia was asked to join in an expedition to recover the arrears due under the treaty of Kharda (1795). Sindia readily agreed. About this time there was much ill-feeling among Sindia's officers and Sindia became very unpopular. Bajirav fostered the feeling of dislike to Sindia, so that if he seized Sindia he might have less difficulty in preventing an outbreak among Sindia's followers. Bajirav arranged with Amritray that Sindia should be invited to his palace and should be seized by Aba Kale who commanded one of the Peshwa's regular battalions. Sindia was asked to come but excused himself. Bajirav ordered him to attend. At their meeting he upbraided Sindia for his. disobedience, and for all the Bufferings which he had caused in Poona. He ordered Sindia to withdraw from Poona to Jamgaon in Ahmadnagar. Sindia expressed the greatest willingness to move, but regretted that until the present arrears of pay were made good, his army could not leave Poona. When the time came to give the signal for seizing him, Bajirav's courage failed and Sindia Was allowed to leave. Bajirav had afterwards the meanness and weakness to tell Sindia what Amritrav had intended and to advise him to be on his guard. Fresh difficulties arose from the arrears of pay due to the Peshwa's army. They were ordered to march to Satara to put down a rising. Instead of starting they raised, a riot in Poona and kicked about the street the turban of one of Baiirav's favourites who tried to interfere. Govindrav Pingle, one of the ministers who was in confinement, sent word to Bajirav that the only man who could bring the troops to order was

Naropant Chakradev the former commander who had been imprisoned as a friend of Nana's Bajirav restored both Pingle and Naropant to liberty, and Naropant quelled the tumult in a day. But as Bajirav could not trust Naropant at a distance he had to release Parashuram Bhau to restore order at Satara. Disorders increased at Poona.

The Widows War, 1797.

Daulatray Sindia's uncle Mahadii on his death in 1795 had loft three widows Daulatray promised to make ample provision for them and they continued to live in his camp. No provision was made and even their comforts were scrimped. The youngest of the three widows was a beautiful woman and the others either discovered or invented a criminal intimacy between her and Sindia. The ladies openly accused Sindia of the crime and Ghatge who was sent to guiet their complaints being refused an entrance forced his way into their tents and seized and flogged them (1798). The Shenvi Brahmans, of whom Baloba was the head and who before Ghatge's rise to power were the strongest party in Sindia's army, took the side of the widows. After much discussion it was arranged that the widows should be taken to Burhanpur and should be kept there in a state of suitable comfort. On their way to Burhanpur their friends learned that the widows were being taken not to Burhanpur but to Ahmadnagar fort Under the influence of the Shenvi Brahmans a Pathan named Muzaffar Khan, who was in command of a choice body of cavalry, assailed the escort, rescued the widows, and carried them back close to Sindia's camp. Ghatge persuaded Sindia to let him attack Muzaffar. Muzaffar had warning and retired with the widows pursued by Ghatge. He left the ladies in the camp of Amritray, Bajiray's brother who was near the Bhima, turned on Ghatge, defeated him and put him to flight. Bajirav approved of his brother's kindness the widows, and asked Colonel Palmer, the British Resident, to mediate between them and Sindia. Sindia refused, and, on the night of the 7th June, sent Ghatge with five battalions of regular infantry under Du Prat, a Frenchman, to surprise Amritray's camp and seize the ladies. Ghatges attempt failed and he had to retire with loss. Sindia then promised to arrange for suitable establishment for the ladies, and Amritrav came into Poona and camped close to Sindia. It was the Muharram time and Ghatge under pretence of keeping order, brought two brigades of infantry and twenty-five guns close to Amritrav's camp, suddenly opened fire on it, charged and dispersed Amritrav's troops, and pillaged his camp. This outrage was nothing less than war with the Peshwa. Holkar came and sided with the Peshwa, the other Maratha nobles joined his standard, and the Peshwa negotiated an alliance with Nizam All Under this

treaty the Peshwa confirmed the articles of the treaty of Mahad which was passed between Nana Fadnavis and the Nizam in 1796; Maratha claims on Bedar were remitted and a tract of territory yielding £80,000 (Rs. 8,00,000) of revenue was ceded to Nizam Ali. Nizam Ali agreed to support the Peshwa against any encroachment of Nana Fadnavis, but in case Nana was set free by Sindia it Was agreed that Bajirav would allow him a yearly pension of £10,000 (Rs. 1,00,000). Raghuji Bhonsala of Nagpur, if he chose, was to be considered a party to this treaty, and was to receive the whole of Garh Mandla from Bajirav. Grant Duffs Marathas 520] Sindia alarmed by the treaty between the Peshwa and the Nizam tried to arrange a settlement, but the demands of the ladies became so extravagant that nothing could be settled. To intimidate Bajirav Sindia sent an envoy to Tipu, but Bajirav had done the same.

Nana Set Free, 1798.

A more powerful means of influencing Bajirav and also a means of raising money was to set Nana Fadnavis free. Sindia brought Nana from Ahmadnagar and received £100,000 (Rs. 10 lakhs) as the price of his liberty. The release of Nana was shortly followed by the revocation of the treaty between the Peshwa and Nizam Ali. These events forced Bajirav to begin negotiations with Nana Fadnavis, and Sindia, who did not know that the treaty between the Peshwa and the Nizam had been revoked, was anxious to come to terms, insisting only that Nana should be placed at the head of Bajirav's affairs. Meanwhile Ghatge had been acting with such reckless cruelty that Sindia felt that Ghatge's disgraceful acts were alienating the minds of all his supporters. He accordingly gave orders for Ghatge's arrest which was successfully effected, Ghatge's arrest helped to reconcile Sindia and Bajirav. The need of reconciliation was also pressed on them by the change of policy on the part of the English. The timid neutrality which had marked the English policy under Sir John Shore was reversed by the Marguis of Wellesley's arrival in India on the 26th of April 1798. Soon after his arrival the Marquis of Wellesley, then Lord Mornington, directed the Political Agents at Poona and Haidarabad to secure the alliance of those states so that at least their resources might not be applied against the British Government. With the object of removing Sindia from the Deccan who was known to be always anxious to obstruct British influence, the British agent at Poona Bet forth the reported designs on India of Zaman Shah king of Kabul, the grandson of Ahmad Shah Abdali terrible to Marathas. The British agent also offered the Peshwa a body of the Company's troops to protect his territory and revive the authority of his government. Bajirav had not

long before asked for the help of British troops and his offer had been refused. He could explain this sudden change in the view of the English only by an understanding with Nana, and his suspicion was confirmed when the English agent spoke strongly in favour of Nana's restoration.

Nana Minister, 1798.

As Nana was the object of Bajirav's strongest hate and fear the wish to prevent an understanding between Nana and the English overcame all other considerations. Sindia was ready to leave for North India but Bajirav at a private meeting persuaded him to stay to prevent Nana from bringing English troops into Poona. While these private negotiations with Sindia were on foot Bajirav was secretly praying Nana who was then in Sindia's camp, to return to Poona and take his post as minister. Nana at first refused unless under a quarantee from the British Government that his person and property should be safe. To overcome Nana's fears Bajirav went alone at night to Nana's house, and using to the utmost his extraordinary powers of persuasion and deception induced (15th October 1798) the old man to resume his post as minister without any guarantee. Within a few months (1799) Nana was told by Yashvantray Ghorpade and by Sindia that Bajiray was again trying to persuade Sindia to put him in confinement. Nana went to Bajiray, charged him with this treachery, and implored him to let him give up his post as minister and withdraw to private life. Bajirav denied any knowledge of the proposals, asked who had dared to make use of his name, and told Sindia to arrest them. Sindia arrested Bajirav's minister Govindrav, and Shivram another of Bajirav's agents, who bore the loss of their property and their liberty without impeaching their master's truthfulness. After this satisfaction Nana resumed his duties. As far as possible Nana avoided public business. But for some months affairs had been in progress which no one at Poona but Nana could prevent from seriously affecting the power of the Peshwa. On the first of September 1798 a new treaty was concluded between Nizam Ali and the English under which Nizam Ali agreed to disband his French troops and replace them with English troops, and under which the English undertook to mediate between the Nizam and the Peshwa and to do their best to bring the Peshwa to a friendly settlement. [Grant Duff's Marathas, 542.] The Marathas viewed this treaty with much jealousy and the British agent urged the Peshwa to conclude a similar treaty. He evaded the subject by an assurance that he would faithfully execute the conditions of existing engagements, and, in the event of a war with Tipu, promised to afford his aid. In these replies Bajirav followed Nana's advice Nana pressed him, after giving these promises, to take care that his promises were

fulfilled; any instance of bad faith would add greatly to the power of the English in their future dealings with the Marathas. In this matter Bajirav followed his own inclination Though, with the help of Parashuram Bhau, Nana arranged that as in 1790 a Maratha contingent should be ready, in 1799, when the fourth Maisur war broke out, the English instead of Maratha support found that Tipu's envoys were publicly received in Poona, and that Tipu's agent had paid Bajirav £130,000 (Rs. 13 lakhs). the Governor General noticed the conduct of the court of Poona by countermanding the detachment which was in readiness to act with Parashuram Bhau, an action which Nana Fadnavis who did not know that Bajirav had received the £130,000 (Rs. 18 lakhs) could not understand.

When he heard that (11th May 1799) Seringapatam had fallen, that Tipu was slain, and that his power was at an end, Bajirav affected the utmost joy, tried to pursuade Colonel Palmer that the backwardness of the Maratha contingent was due to Nana, and sent urgent orders to the governor of the Maratha Karnatak to advance into Tipu's country. Sindia also, while secretly striving to encourage resistance among Tipu's partisans, sent abundant congratulations to Colonel Palmer. Though the Peshwa had failed in his promise of help, in the hope of making him agree to a treaty like the treaty he had concluded with the Nizam, the Governor General set apart a portion of Tipu's conquered country for the Marathas. This tract of territory, which included the greater part of the Sunda lands now in North Kanara, yielding an estimated revenue of £26,300 (Es. 2,63,000), was rejected by the Peshwa. The Poona Government regretted that the disorder in the Maratha country had prevented them from sending the promised contingent to act against Tipu; in the case of the French landing in India the Peshwa undertook to join with the English in fighting them, at the same time the Peshwa would not agree to exclude Frenchmen from his service.

The Widows, War, 1799.

He refused the Company's offered mediation in his existing disputes with the Nizam, and treated as absurd the proposal to include Raghuji Bhonsla of Nagpur as a principal in the intended alliance. Sindia's affairs continued in confusion. After Ghatge's attack on Amritrav's camp in 1798 the ladies sought refuge with the Kolhapur chief. In Kolhapur they were joined by the leading Shenvi Brahmans in Sindia's service. Numbers of horsemen flocked to their standard, and they marched north (February 1799) burning all Sindia's villages between the Krishna and the Godavari. Sindia's horse fled before them, and,

though they gave way to his regular battalions, as soon as the regular troops turned to go back to Poona the ladies' troops followed them and continued their work of ruin. The country swarmed with horsemen, and though plunder was not indiscriminate the devastation was great. [Grant Duffs Marathas, 545.] In addition to his troubles with the widows Sindia's power was threatened by a revolt in North India and by the escape and rapid success of Yashvantrav Holkar in Malwa. In these straits Sindia's headmen advised him to set Baloba Tatya free and appoint him minister. Baloba promptly made a settlement with the ladies. But after all was arranged the murder of one of their followers enraged the ladies and they withdrew and again marched through the country plundering. [Grant Duffs Marathas, 546.] In August 1799, with the approval of their chiefs, Baloba and Nana deliberated on measures to counteract the close alliance between the Nizam and the English. For some time Satara and Kolhapur had fallen into complete disorder and Parashuram Bhau the Peshwa's commander had lately been killed. A combined force of the Peshwa and Sindia marched towards Kolhapur, defeated the chief, forced him to seek safety in Panhala besieged Kolhapur, and had nearly taken it when (1800) events at Poona forced a prompt settlement and saved the existence or at least the independence of the Kolhapur state.

Nana Dies, 1800.

Nana's health, which had long been declining, failed rapidly in the beginning of 1800, and he died at Poona on the 13th of March. This event sealed the ruin of the Peshwa's government. In figure Nana was tall and thin, dark in complexion and grave in manners, with a quick searching and intelligent expression. In private life he was truthful, frugal, and charitable a most orderly and painstaking worker. He respected the sincerity and vigour of the English, but, as political enemies, looked on them with the keenest jealousy and alarm. As a politician his early life was disfigured by timidity and ambition. During his last years he acted with the courage and sincerity of a patriot, regardless of consequences to himself, counselling Bajirav to do what he believed was for the good of the state. In his early life he devoted his energies to maintain the improved civil management which had been established by Madhavrav Ballal (1761-1772). In later years home intrigues and foreign troubles so filled his time and his thoughts that in practice almost all check on abuses disappeared. Even in Poona city so slack was the control that Ghasiram the head of the city police was able without check to commit a series of murders, and at last, when his guilt was proved, was punished not by the law but by a rising of the townsmen who stoned him to death. With Nana passed away all that was wise and moderate in the Peshwa's government.

Nana died leaving a young widow and no children. The desire to seize his wealth, which in spite of all he had latterly been forced to part with was said to be still immense, soon set Sindia and Bajirav quarrelling. When the insurrection in North India was crushed Sindia, under the influence of Ghatge determined to destroy Baloba. He was seized and thrown into Ahmadnagar, death freeing him from the tortures which Ghatge had planned for him and which he carried out in the case of two of Baloba's supporters blowing one from a gun and mangling the other by tying round him and setting fire to a belt of rockets. While Sindia vented his hate on the Shenvi Brahmans, Bajirav gratified his revenge by seizing and throwing into confinement the former supporters of Nana and of Parashuram Bhau and other Patvardhans. Sindia was now all-powerful at Poona. He had Bajiray so entirely in his hands, that he for some time kept a guard round Bajirav's palace lest he should attempt to escape. Before the close of 1800, the rapid success of Yashvantrav Holkar, who had overrun almost the whole of Malwa compelled Sindia to leave Poona and march north. Before he left Poona he forced Bajirav to give him bills worth £470,000 (Rs. 47) lakhs). Several bloody battles were fought between Sindia and Holkar in Malwa. The infamous Ghatge joined Sindia's army and gained complete victory over Holkar. Yashvantrav, though nearly ruined, by a skilful march arrived unexpectedly in the neighbourhood of Poona. When Sindia left Poona, instead of trying to win the respect of his people. Bajiray gave his attention to distressing and pillaging all who had opposed either himself or his father. One of the first who suffered was Madhavrav Rastia, whom he invited to visit him, seized, and hurried to prison.

Vithoji Holkar Killed, 1801.

This act, followed by others like it, caused general discontent. Lawlessness spread and the Deccan was filled with bands of plundering horsemen. Among the prisoners taken in one affray was Vithoji the brother of Yashvantrav Holkar. According to Maratha practice the punishment to prisoners taken in a plundering raid was not always death. Something short of death might have sufficed in the case of a son of Tukoji Holkar. But Tukoji Holkar had been Nana's friend and the Holkars were Sindia's enemies. So to death Bajirav added disgrace and sat by as Vithoji was bound to an elephant's foot and dragged to death in the streets of Poona (April 1801). Bajirav's cruelty brought on him the hate of Vithoji's brother Yashvantrav, a hate which for years

haunted Bajirav's coward mind. Shortly after Vithoji's death, the news of Yashvantra's vow of vengeance and of his successes against Sindia's troops at Ujjain (June 1801) led Bajirav to address him in friendly terms as the heir of Tukoji Holkar. As Sindia was fully occupied with his fight against Holkar, who had more than once defeated his troops, Bajirav thought the opportunity suitable for seizing Sindia's officer Ghatge. Ghatge, whose plundering was causing much misery in the Deccan, came into Poona and in his demands for money insulted the Poona Court. Balaji Kunjar, Bajirav's favourite, asked him to his house to receive some of the money he demanded. Ghatge came; but noticing from a signal given by Balaji Kunjar that treachery was intended, he forced his way out, leaped on his horse, escaped, and returned to Poona with a force threatening to sack the city.

Yashvantrav Holkar's Invasion, 1802.

The British Resident was called in to effect some settlement of Ghatge's claim, and Poona was saved further loss by an urgent message from Sindia requiring Ghatge in Malwa. Early in 1802 Shah Ahmad Khan, an officer detached by Yashvantrav Holkar, carried his ravages into the Peshwa's territories between the Godavari and Poona, and cut off almost to a man a force of 1500 horse under Narsing Khanderav the chief of Vinchur. The consternation at Poona caused Baijray to renew negotiations with the English. He wished to have a force, but he objected to its presence in his territory, and he still refused to agree that the English should arbitrate between him and the Nizam. Yashvantrav Holkar himself soon moved towards Poona. The Peshwa did all in his power to stop him. Yashvantrav said, You cannot give me back Vithoji but set my nephew Khanderav free. Bajirav promised; but, instead of setting him free, had Khanderav thrown into prison at Asirgad. Meanwhile Sindia's army joined the Peshwa's, and together they prepared to stop Holkar at the Ali Bela pass in north Poona. Yashvantrav, knowing their strength passed east by Ahmadnagar, joined his general Fatesing Mane near Jejuri, marched down the Rajvari pass, and on the 23rd of October 1802 encamped between Loni and Hadapsar about five miles east of Poona.

About eight days before Yashvantrav's arrival the joint Sindia-Peshwa army had fallen back from Ali Bela and taken a position close to Poona near the present cantonment. The Peshwa ordered Yashvantrav to retire. He replied he was willing to obey; but that Sindia, not he, was the rebel and had refused to give up Yashvantrav's nephew Khanderav whom Bajirav had ordered him to set free.

Yashvantrav Holkar's Victory, 1802.

On the morning of the 25th of October the armies met, and, after a well contested fight, the battle ended in a complete victory for Yashvantrav which was chiefly due to his own energy and courage. Bajirav making sure of victory came out to see the battle but the firing frightened him and he turned southward. On learning the fate of the battle he fled to Sinhgad. From Sinhgad he sent an engagement to Colonel Close binding himself to subsidise six battalions of sepoys and to cede £250,000 (Rs. 25 lakhs) of yearly revenue for their support. He had already agreed to waive his objection to allow the troops to be stationed in his territory. For some days after his victory Yashvantrav showed great moderation at Poona. He placed guards to protect the city, treated Bajirav's dependents with kindness and made several attempts to persuade Bajirav to come back. Bajirav, after staying three days in Sinhgad, fled to Raygad in Kolaba, and from Raygad retired to the island of Suvarndurg off the north coast of Ratnagiri.

Bajirav leaves Poona.

From Suvarndurg, alarmed by news of the approach of one of Holkar's generals, he passed to Revdanda, and from Revdanda sailed in an English ship to Bassein which he reached on the 6th of December 1802. Meanwhile at Poona, when Holkar heard that Bajirav had fled from Sinhgad, he levied a contribution from the people of Poona. The contribution was arranged by two of Bajiravs officers and it was carried out in an orderly manner. When Yashvantrav found that Bajirav would not return he sent a body of troops to Amritrav with the offer of the Peshwaship. Amritrav at first refused; but, when Bajirav threw himself into the hands of the English, Amritrav held that he had abdicated and took his place. After much hesitation he was confirmed as Peshwa by the Satara chief.

Poona Plundered, 1802.

This settlement of affairs at Poona was followed by a plunder of the city as complete and as wickedly cruel as Sindia's plunder in 1798. Every person of substance was seized and tortured out of their property and several out of their life. The loss of property was unusually severe as some time before the battle of the 25th of October Bajirav had set guards to keep people from leaving Poona and Holkar took care that after the victory these guards were not withdrawn. These excesses were begun even before Colonel Close left Poona. Both Amritrav and Holkar were anxious to keep Colonel Close in Poona.

They wished him to mediate in their differences with Sindia and the Peshwa, and his presence seemed to show that the British Government approved of their usurpation of power. Finding that no persuasion could alter Colonel Close's purpose he was allowed to leave on the 20th of November 1802.

Treaty of Bassein, 31st December 1802.

On the 31st of December 1802, at Bassein in the North Konkan, Bajirav agreed to a treaty, under which the English undertook to restore Bajirav to power in Poona and to maintain permanently in the Peshwa's dominions a subsidiary force of 6000 regular infantry with the usual proportion of field artillery and European artillery-men. In return for these troops the Peshwa agreed that district yielding a yearly revenue of £260,000 (Rs. 26 lakhs) should be assigned to the English; that he would keep a force of 3000 infantry and 5000 horse; that he would entertain no European of any nation hostile to the English; and that he would have no dealings with any power without consulting the British Government. The treaty of Bassein made the English sovereign in the Deccan; Bajirav bought safety at the cost of independence. In March 1803 to re-establish Bajirav at Poona the subsidiary force at Haidarabad under Colonel Stevenson took a position at Purinda near the Peshwa's eastern frontier. General Wellesley was detached from the main army of Madras which was assembled in the north of Maisur, and, with 8000 infantry and 1700 cavalry, was directed to march towards Poona to co-operate with Colonel Stevenson. General Wellesley left Harihar in Maisur on the 9th of March and crossed the Tungbhadra on the 12th. On the banks of the Krishna he was joined by the Patvardhan and other Maratha and Brahman Karnatak estateholders, all of whom, especially the Patvardhans, showed much friendliness to the British. On the 19th of April as he drew near Poona, General Wellesley was warned that Bajirav's brother Amrit rav was likely to burn the city. To prevent this misfortune General Wellesley pressed on with the cavalry of his division, and the Maratha troops under Apa Saheb Gokhla and others of the Peshwa's officers, using such speed, that, though kept six hours in the Little Bor pass, he reached Poona on the 20th of April after a march of sixty miles in thirty-two hours. [General Wellesley's route was by Miraj and Pandharpur to Baramati. He camped at Baramati on the 18th of April and at Moreshvar on the 19th. At Moreshvar he heard that Amritray meant to burn Poona. After halting for a few hours at Moreshvar he moved with one native battalion and the whole of his cavalry. Though detained six hours in the Bor pass he entered Poona at two on the 20th of April, a march of sixty miles in thirty-two hours.

The infantry joined him on the 22nd. Col. Close in Wellington's Despatches, I. 166. During this war General Wellesley made one greater march than this. When engaged on the Godavari he started on the morning of the 4th of February 1804 with the British cavalry, the 74th Regiment, the first battalion of the 8th Regiment, 600 men belonging to other native corps, and the Maisur and Maratha cavalry. After a march of twenty miles on the 4th word was brought that the enemy were twenty-four miles oft He marched again on the night of the 4th, but the road was bad and they did not reach the place named till nine next morning. The infantry arrived at the point of attack along with the cavalry. The enemy had heard of their advance, were in retreat, but still in sight. They were pursued from height to height till the whole body was scattered. All was over by twelve on the 5th. The troops had marched sixty miles in thirty hours. General Wellesley thought this was quicker even than Marathas. He often spoke of it as the greatest march he ever made. Wellington's Despatches, II, 97, 98, 100. 101; III. 448.] In the country south of the Bhima straggling bodies of Holkar's plunderers were seen, who, on being ordered to desist, had retired. Before General Wellesley reached Poona all hostile troops had left. Holkar had gone to Chandor in Nasik some days before, and Amritrav had started that morning for Sangamner in Ahmadnagar, [Amritray fought and defeated the Raja Bahadur of Nasik. He afterwards entered into an agreement with General Wellesley, and finally retired to Benares on yearly pension of £80,000 (Rs. 8 lakhs), Grant Duff's Marathas, 569.1

Bajirav Restored.

On the 13th of May, escorted from Panvel by 2300 infantry of whom 1200 were Europeans, Bajirav entered Poona, was installed as Peshwa, and received presents from the leading men of the state.

Condition, 1803.

In consequence of the ravages from which the country had for some years suffered, and especially from the ruin caused by Holkar and his Pendharis, 1803 was a year of scarcity in the Deccan, and, in consequence of the complete failure of rain in September and October 1803, the last months of 1803 and the first half of was a time of deadly famine. Meanwhile, secretly encouraged by Bajirav, Sindia and Raghuji Bhonsla were preparing to contest British supremacy in the Deccan. The capture of Ahmadnagar fort on the 12th of August 1803 and the famous victory of Assaye, 160 miles north-east of Poona, on the 23rd of September made the British supreme in the Deccan. [The

Hon. Mountstuart Elphinstone, who was on General Wellesley's staff at the head of one of the branches of the Intelligence Department and took part in all the engagements in this war, describes the Maratha camp as an assemblage of every sort of covering of avery shape and colour, spreading for miles on all sides over hill and dale mixed with tents, flags, trees, and buildings (Colebrooke's Elphinstone, 1,175; II. 137). When the Marathas marched, a sea of horse foot and dragoons poured over the country fifteen miles long by two or three broad. Here and there were a few horse with a flag and a drum, mixed with a loose and straggling mass of camels, elephants, bullocks, dancing girls, beggars and buffaloes, troops and followers, lancemen and matchlockmen, traders, and agents or *mutsadis* (Ditto). Of his life in the English camp Mr. Elphinstone gives the following details: Tents are struck before five and early breakfast is taken about six. Then we mount and ride coursing a mile or two out on the flank, reach the camping ground between ten and twelve, and sit if the chairs have come or lie on the ground. When the tents are pitched we move into them and talk till breakfast. After breakfast we work read talk or rest in the tents till dark. Then comes some exercise, dressing for dinner, dinner, and talk till nine. Colebrooke's Elphinstone, I. 84-85.] For some time the country round Poona continued disturbed by insurgents and freebooters. When they were crushed, until Bajirav stirred war in 1816, the presence of British troops at Poona, Sirur, and Ahmadnagar preserved peace. When it passed under British sovereignty Poona, like most of the Deccan, was little more than a desert. In January 1803, writing from information received at Maisur, General Wellesley described the country round Poona as entirely exhausted. [Wellington's Supplementary Despatches, III. 531, 559.] It was in great confusion. The heads of villages and districts no longer obeyed the chiefs who had governed them; each had assumed supreme authority in his own district, and they were carrying on a petty but destructive war against each other. In April 1803, after his march from Miraj through Baramati and the Little Bor pass, General Wellesley wrote: [Wellington's Despatches I.143.] In the country to the southeast of Poona Holkar could not possibly maintain an army. They have not left a stick standing within 150 miles of Poona. They have eaten the forage and grain, have pulled down houses, and have used the material as firewood. The people have fled with their cattle. Between Miraj and Poona, except in one village, not a human being had been seen. General Wellesley's rapid march saved Poona from burning. The people showed the most lively gratitude and great numbers returned to their homes. [Wellington's Despatches, I.145.] The Poona market was well supplied with grain, [Wellington's Despatches I. 147.] but forage was so scarce that General Wellesley determined to march west

to the hills. He went no further than Punavle, about fifteen miles to the west of the city because he found that as soon as he moved all the people of property left Poona. [Wellington's Despatches, I. 555;III. 91.] From Punavle he sent his cattle farther up the valley to graze. Wellington's Despatches, III. 91. In the country to the north-east of Poona (18th June 1803) the people were in the villages and they had grain in underground pits, but there was no government, or indeed anything but thieving. [Wellington's Despatches, in. 186,188.] The country was very poor. From the Peshwa to the lowest horse man no one had a shilling. [Wellington's Despatches, III. 190.] The entire Maratha territory was unsettled and in ruins. Owing to Holkar's plunder and extortion whole districts were unpeopled and the towns destroyed. As the estateholders for several years had received no rents they were forced to allow their troops to plunder their own territories. Every man was a plunderer and a thief; no man who could seize or steal would till. [Wellington's Despatches, I. 240.] The Peshwa's resources were small and the land about Poona was waste. [Wellington's Despatches, I.332. In 1803 the rainfall in June July and early August was sufficient, apparently abundant. [Wellington's Despatches, I. 288 and other passages.] But the late rains of September and October completely failed; except in the west the bulk of the early harvest must have perished and the late crops were probably never sown. The failure of rain was specially severe in the central and eastern parts of Poona and Ahmadnagar. By the eleventh of October there was every reason to expect a great scarcity of grain if not a famine. The troops in Poona could be supplied only from Bombay and Bombay only from Kanara. In Bombay the fear of famine was so strong that Governor Duncan kept for the use of the settlement grain which was meant to have gone to the army in the Deccan. [Wellington's Despatches, I. 441-447.] Even in the hilly west of Poona, which depends little on the late rains, early in October, famine was raging. Travels, II. 112-169. Lord Valentia noticed that the Indrayani or Bor pass valley between Karla and Talegaon was strewn with agates, onyx, and carnelian. When he was Poona he made a large collection of agates which were to be had in profusion. Ditto, II, 113. The English traveller Lord Valentia reached Khandala from Bombay on the 9th of October. Close to the pond vultures and dogs were feeding on about a hundred dead bodies. Famine was in every face several houses were empty, and the last victims had never been removed from the places where they perished. This terrible suffering seems not to have been due to a local failure of rain as the hill were green to the top, there were many paddy fields, and the harvest was nearly ripe. Karla was the first stage from Bombay where Lord Valentia saw no famine corpses. The country near Talegaon was level and without tillage or trees, and a little

beyond Chinchvad were signs of Holkar's devastations: the village of Aundh on the Mutha was nearly in ruins. The streets of Poona showed no great signs of suffering, but the sight of dead bodies on the river banks in every stage of decay was distressing. Colonel Close the resident distributed charity chiefly from a fund of £4000 (Rs. 40,000) which Lady Mackintosh had collected in Bombay. He at first gave the people boiled rice. But the sight of the food drove the people nearly frantic and numbers lost their share. Money (2 as.) was accordingly given instead of grain. About 5000 people were relieved every day. The Peshwa confined his charity to the relief of Brahmans of whom he fed great numbers. [Lord Valentia was present at the Dasara on the 13th of October. There was a great review in which the British troops took part. The Peshwa, on an elephant, passed along the line to a spot where the branch of a tree had been stuck in the ground. He got off the elephant and performed the ceremonies. He plucked some ears of corn, a salute was fired, and he went off in a looking-glass elephantcar. Formerly whole fields of corn used to be wasted, the Peshwa leading the wasters., Travels, II. 123-124.]

Condition, 1803-1804.

In December 1803 General Wellesley wrote: [Wellington's Despatches, I. 547. The Peshwa has not in his service a common writer or civil officer to whom he can trust the management of a single district. His territories are all either in the hands of his enemies or are without managers on his part. All the persons capable of arranging his state are either in the service of his enemies or are imprisoned and oppressed by himself. Rich districts are going to ruin because all the persons fit to manage them are in prison or oppressed by the Peshwa. Unless the Peshwa sets these people free and employs them in settling the country the Poona state will never revive. In January 1804 General Wellesley described the Deccan as a chaos. If a militia was not raised and government put in some regular train all must fall to pieces. [Wellington's Despatches, II. 16,17.] The Peshwa's government was only a name. The country along the Bhima five miles north of Poona was unsettled, a dreary waste overrun with thieves. The Peshwa was unfit to manage the government himself. He gave no trust or power to any one and had no person about him to conduct the common business of the country. [Wellington's Despatches, II 42.] Towards the and of February (23rd) General Wellesley wrote [Wellington's Despatches, II. 125, 127. The Peshwa does nothing to improve his government. His only system of government is that of a robber. He does not choose to keep up an army and his territories are overrun by armed men who are ready to enlist with any one who will lead them to

plunder. Except the British troops there is no power in the country to support the government and protect the industrious classes of the people. Conceive a country in every village of which twenty to thirty horse-men have been dismissed from the service of the state and have no means of living except by plunder. There is no law, no civil government, no army to keep the plunderers in order; no revenue can be collected; no inhabitant will or can remain to cultivate unless he is protected by an armed force stationed in his village. Habits of industry are out of the question; men must plunder or starve The state of the police was also lamentable. The Peshwa's ministers and favourites were the patrons and the sharers of the profits gained by the thieves in their plunder of those whose necessities forced them to travel through the country. [Wellington's Despatches, II, 128,129, 187.] In March, General Wellesley wrote: Bajirav's great object is to gain money to meet the expense of the pleasures of his court. He makes no attempt to organize the force, which, under the treaty of Bassein, he is bound to support, and is anxious to employ English troops in putting down robber and helping his revenue-collectors. General Wellesley refused to have anything to do with the police of the country or the little dirty amildari exactions. [Wellington' Despatches, II.85,147,187.] At the end of April (23rd) the accounts of the state of the Deccan were very distressing. Even in the Nizam's country, which was better off than the west, the sufferings were extreme. It was scarcely possible to get forage or grain; a detachment was some days without food and lost 100 horses in one day. At Poona the British cavalry horses had for some time been fed on Bombay rice. Rice was not wholesome food for horses, but it was the only grain that could be got. General Wellesley doubted if he could move his troops from Poona. [Wellington] Despatches, II. 214. In May matters were worse. In Poona all but the fighting men suffered much distress. By great exertions grain was procured but it sold for five pounds (2½ shers) the rupee. Forage was very scarce except near the Bor pass, and even there it was dear and bad. [Wellington's Despatches, II. 224-225.] In the beginning of June, so many cattle died and General Wellesley received such dreadful accounts of the want of forage that he determined to stay in Poona as a measure of prudence if not of necessity. [Wellington' Despatches, II. 288.]

1805.

[Mackintosh's Life, I. 274-288.] Towards the end of December 1805 Sir James Mackintosh, the Recorder or Chief Justice of Bombay (1804 - 1811), came from Bombay to visit Colonel Close the Resident at Poona. He was pleased with Chinchvad and its sacred family, in one of

whom the god Ganesh dwelt, and whose sacredness had saved the village from ruin in Holkar's ravages in 1802. Just before reaching Poona, Mackintosh was interested to see a thousand Maratha horse, a fair sample of the terrible cavalry who had wasted and won almost the whole of India. Their air was martial even fierce and next to the Bombay watermen, probably the Koli fishermen, they were more robust than any Indians Mackintosh had seen. They had no uniform and their clothes and arms were most neglected. Their horses varied; some were very wild and some very mean, none were showy. The English in Poona moved with considerable state. In front went two scarlet-coated couriers or harkaras on camels, then an escort of sepoys, then several scarlet mace-bearers, then some of the party on horses and the rest on elephants. The Residency at the Sangam, which Mackintosh describes as a set of bungalows spread over the enclosure, was fitted conveniently and luxuriously. Poona city bad its principal streets payed with stone and was reckoned one of the best built native towns in India. The Peshwa's residence, the Saturday Palace or Shanvar Vada, from its size well deserved the name of palace. A gateway opened into a large rather handsome square surrounded by buildings, whose walls were painted with scenes from Hindu mythology. The staircase at one corner was steep and narrow, an odd contrast to the handsome square. The audience hall was a long gallery supported by two rows of massive wooden pillars. The hall was carpeted and at one end on a white cloth were three pillows, the Peshwa's state seat. Bajirav, who was then about thirty-four, was a fair man, very handsome, with a perfect gentlemanlike air and manner, simply and neatly dressed in white muslin. He had the easy bearing of one who had a long familiarity with a superior station. Though more elegant than dignified he was not effeminate. Of the three chiefs of nations to whom Mackintosh had been presented, George III., Napoleon, and Bajirav, Mackintosh preferred the Brahman. [Mr. Elphinstone on first meeting Bajirav (April, 1802) found him a handsome unaffected person, with a good and dignified face though there was some coarsenss about the mouth. Colebrooke's Elphinstone, I. 46.]

Condition, 1805.

The etiquette of Bajirav's court was a whisper. When they moved to Bajirav's own room, an unfurnished bare-walled closet with a white floor cloth and some small pillows, Bajirav spoke warmly of his happiness under the British alliance. Mackintosh's assurance that the English would always protect his security and comfort, brightened his face with apparently genuine delight. Mackintosh thought Bajiravs

feelings natural, perhaps reasonable, and obviously unaffected. He had lost independence but had gained rest for himself and his people, personal enjoyment and comfort, and outward dignity. An ambitious man might prefer the independence, a philosopher's choice might vary. Bajirav was neither a hero nor a sage; he was devoted to nothing but to women and to the gods. On leaving the palace a diamond crest was fastened in Mackintosh's hat, a diamond necklace was thrown round his neck, and several pieces of gold and silver cloth and fine muslin were laid before his feet. According to custom these presents were given up and sold on account of the Honourable East India Company.

In spite of the unfeigned obviously natural joy and thankfulness which carried conviction to such shrewd and practised observers as Lord Valentia, Sir James Mackintosh, and Colonel Close, since his restoration to power, Bajirav had been steadily disloyal to the English. [Colebrooke's Elphinstone, I 291. Lord Valentia, who had three interviews with Bajirav in October 1803, was satisfied that the Peshwa highly valued the English alliance and was sincerely delighted when he heard the news that Holkar's fort of Chandor in Nasik had fallen to the English army (Travels, II. 130). Colonel Close, according to Lord Valentia, had no doubt that the Peshwa was sincere in his gratitude to the English. He had never seen the Peshwa so evidently pleased or heard him more unequivocally declare his sentiments. The way in which the Peshwa and his brother Chimnaji lived together without jealousy proved how excellent was the Peshwa's heart (Ditto, 136). With Lord valentia's, Sir James Mackintosh's, and Colonel Close's high opinion of Bajirav's evident sincerity it is interesting to compare the Duke of Wellington's opinion, who, and Mr. Elphinstone under his influence, were the only Englishmen who resisted the fascination of Bajirav's manner. The Duke of Walling ton, says Grant Duff (Marathas, 572 foot), had (1803) remarkably correct view of Maratha character; his opinion of Bajirav's future conduct was prophetic. In MAY 1803, when Bajirav was established at Poona, Colonel Close (Wellington's Despatches, I. 170) described the Peshwa's disposition as wholly satisfactory. The Duke at the same time (14th May 1803) wrote (Ditto, 164): The Peshwa showed much quickness and ability: he appeared particularly anxious to perform the stipulations of the treaty at the smallest possible expense to himself. Early in June, when he had to leave Poona to act against Sindia and the Berar chief without any help from Bajirav, the Duke (4th June; Ditto, I. 179) felt that the Peshwa had broken the treaty by not furnishing an army and had broken his word to the Duke by not settling with the southern chiefs. Still he believed the Peshwa was not treacherous. On the 8th of June (Ditto,

III. 166) he began to doubt if the Peshwa was only incapable. Stubborn facts proved that something besides the Peshwa's incapacity for business prevented a Maratha army helping the English. On the 19th of June (Ditto, I. 186-188), when he could get no supplies and was worse off than in an enemy's country, be could no longer help feeling that the Peshwa was thwarting him. On the 20th of June he believed the Peshwa disliked the English alliance. He had found out that the Peshwa had daily communications with Sindia and Holkar of which the Resident at Poona knew nothing (Ditto, III. 191). On the 23rd of June (Ditto, III. 201) he describes Bajirav as unwilling as well as incapable, a prince the only known principle of whose character is insincerity On the 24th of June (Ditto, I. 194) the Duke was satisfied that the Peshwa was not true to the English cause and was Preventing grain coming to his army. On the 28th of September he wrote (Ditto, I.410): The Peshwa is sincere in his intention to keep to our alliance, but there is crookedness in his policy. He has no ministers; he is everything himself and everything is little. In January 1804 he wrote (Ditto, II. 87-88): The Peshwa's only principles of government are revenge and jealousy of me. He will begin again, or latter will continue for I believe he has never stopped, his intrigues with Sindia. I certainly hare a bad opinion of him; he has no public feeling and his private disposition is terrible. I have no positive proof that he has been treacherous, but I have a strong suspicion of it, and I know that since he has signed the treaty of Bassein he has done no one thing that was desired. In February 1804 (Ditto, III. 468), when he found that Bajirav had Frenchmen hid for a month In Poona, he wrote: Is not this shocking? What is to be dene with the fellow? This is our good and faithful ally! And again on the 7th of March (Ditto, II. 138): The Peshwa is callous to everything except money and revenge. If he is sincere how can we explain his never telling the Resident that the Frenchmen had come to Poona. According to Mr. Elphinstone, who, after studying his character for several years (November 1815): Bajirav's ruling passions were fear and revenge. His great art was dissimulation. He was habitually insincere, joining a talent for insinuation to a natural love of artifice and intrigue. His want of courage and his love of ease thwarted his eagerness for power and his fondness for deference. He was proud and haughty but to serve his ends stooped to any meanness. Changeable humours hid fixed designs. He was able, humane when neither afraid nor vengeful, frugal, courteous, and dignified. Half his life was spent in fasts, prayers, and pilgrimages, and a large share of his revenue on magical practices. He was most strict to quard against ceremonial impurity, and almost daily spents boon in disgusting debauchery in large assemblies of women of rank. (Colebrooke's Elphinstone, I. 287-288.)

He wrote (1803) to the chiefs who were in league against the English explaining that his wretched dependence on the enemy was due to the treachery of the southern estate-holders; he failed to give General Wellesley any help in his campaign against Sindia (1803), and did his best to stop his supplies; and in conducting his affairs with the English Resident, he employed Sadashiv Mankeshvar, whose chief qualification for the post was his open enmity to the English. That the English recommended it was enough to secure the failure o£ any plan for the good of his government. During the years between 1805 and 1311, under Colonel Close and for a abort time after under Mr. Russel, affairs went smoothly at Poona. Bajirav for a time seems to have honestly considered the English alliance a piece of good fortune and the country greatly improved. [Colebrooke's Elphinstone, I. 246.]

Condition, 1808.

On the 10th of November 1808, Sir James Mackintosh paid a second visit to the Deccan. He found Karla a miserable village of fifteen or twenty huts and about fifty people. It paid £100 (Rs. 1000) a year to a man of rank at Poona, who had lately threatened to raise the rent to £120 (Rs. 1200), and the people had threatened to leave. Mackintosh thought the state of the people wretched. They felt they were governed only when they paid taxes, in every other respect they were left to themselves, without police or justice, except such as the village system supplied. It was hard to say why taxes were paid, unless to bribe the sovereign to abstain from murder and robbery. At Talegaon the wood entirely ceased. The land was bare and little cultivated; there were no villages; the road was lonely; and the whole country seemed empty. At Punavle were the ruins of a large castle or vada which had been destroyed by Holkar in 1802. It had both square and round towers and was not unlike an English feudal castle of the rudest form. Sir James was met by Colonel Close on the morning of the 12th of November and taken on an elephant to the Sangam. He describes Colonel Close as without accomplishment or show, plain, cautious, and with a degree of mildness that formed a singular contrast with the firmness and even sternness which he had shown on trying occasions. He had a calm understanding, wholly employed in practice, united to a strength of nerve which qualified him equally, for a cautious or a vigorous policy. He was a very superior man who among common observers might easily have passed for a very common man. Mr. Elphinstone (21st September 1812) describes Sir Barry Close as a man of a strong and hardy frame, a clear head, and vigorous understanding, fixed principes unshaken courage, and a contempt for pomp and pleasure. His entire devotion to the public service and his

extreme modesty and simplicity combined to form such, a character as one would expect to meet in ancient Rome rather than in our own age and nation. Colebrooke's Elphinstone, I.270. According to Colonel Close's information the population of the city of Poona was about a hundred thousand. The police was entrusted to a military Brahman of the family of Gokhla who had a considerable establishment and his duty was either so easy or 150 skilfully performed, that, notwithstanding the frequent meeting of armed men, instances of disorder were rare. Gokhla punished all small offences. Great crimes were punished by the officers entrusted with the districts and in very serious cases by the government. Capital punishment was rare. Civil disputes were settled by arbitration under the sanction of the ministers. There was not a court of judicature, nor a judge in the whole Maratha dominions; nor were there any regular forms of trial. [Nothing seemed so strange to the Recorder as that so great a country could exist without a judge. Two circumstances diminished his wonder. The first was the power of the officers of villages or rather townships, who, throughout India, preserved a sort of republican constitution under despotic princes and retained their authority in the midst of the revolutions among their superiors. The second was the great power of the Brahmans and heads of castes who were a kind of natural arbitrators in all disputes, and who could punish offences by expulsion from caste, a penalty more terrible than any which the law could inflict. These two authorities, with the irregular jurisdiction of the executive officers, were sufficient to maintain tranquillity. Still the absence of regular forms of criminal justice had the usual effect in corrupting nations so unfortunate as to be destitute of that great school of morality. Sir James Mackintosh's Life, I. 460-1.] Mackintosh speaks less civilly of Bajirav than he spoke of him in 1805: The Peshwa has just come back from Pandharpur. He is a disgusting mixture of superstition and dissolute manners, a combination which was not unnatural among Hindus, who, in Mackintosh's opinion, had expunged purity of manners from their catalogue of virtues.

1811.

During the six years ending 1811 the bulk of the residency work was in the hands of a Parsi named Khusruji, a man of judgment and great address, who had been won over to the Peshwa's interests. In 1811 Mr. Russel was succeeded by the Honourable Mountstuart Elphinstone. Mr. Elphinstone had been at Poona in 1802 as Colonel Close's assistant, in 1803 he was on General Wellesley's staff in the war against Sindia and the chief of Berar, and between 1803 and 1807 he was Resident at the Berar chief's court at Nagpur. [Mr. Elphinstone's

plan of life at Poona was to ride ten to twenty miles in the morning, do club exercise, breakfast, apply to public business and private correspondence from about ten to two, lunch on a few sandwiches figs and a glass of water, rest half an hour, read and write, drive in the evening, take more club exercise, dine on a few potatoes and one or two glasses of claret and water, and read till sleep at eleven. Especially in the hot weather he suffered much from low spirits and bad health. Colebrooke's Elphinstone, I. 235. Mr. Elphinstone was well versed in Maratha politics and Maratha state-craft, and did all business direct not through Khusruji. This change was most distasteful to Khusruji who succeeded in raising in the Peshwa's mind a dislike of Mr. Elphinstone. This dislike was to a great extent removed in 1812, when, as the Patvardhan and other southern estate holders refused to acknowledge the Peshwa's supremacy, Mr. Elphinstone assembled an army at Pandharpur, marched towards the Krishna, and forced the estate holders to abide by their original agreement with the Poona state. Bajirav was profuse in his acknowledgments to Mr. Elphinstone. In 1813, in connection with these troubles, he declared that he wished to have no more vassal horse. The Peshwa had soon a fresh instance of the value of the British force whom he found it necessary to call in against Apa Desai, who, refused to comply with certain claims devolving on the Peshwa by the late settlement and to give up some territory belonging to the Raja of Kolhapur. The British authorities interposed, but Bajirav artfully contrived to induce Apa Desai to trust to his lenity, and resist the demands. By this insidious conduct the Desai was led to forfeit one-fourth of his estate to the Peshwa. Grant Duffs Marathas, 621, Compare Colebrooke's Elphinstone, I.253.] He was anxious to raise a brigade of native infantry, drill it by European officers, and pay it from his treasury. To this the Governor General readily agreed (1813), and, at Khusruji's suggestion, Captain John Ford, of the Madras establishment, who had been long attached to Colonel Close's escort, was appointed commandant of the brigade. Able officers from the line, chosen by Captain Ford, were also lent from the Bombay establishment to help to form and discipline the corps. Except a small proportion of Marathas the men were chiefly raised in the Company's provinces in Northern India. On entering their battalions they swore fidelity to the Peshwa, adding of their own accord the condition, so long as he continued in alliance with the British. The cantonment allotted for this brigade was at the village of Dapuri about four miles north-west of Poona. One brigade of British troops was stationed at Poona near Garpir, a spot originally chosen to quard the city; the rest of the subsidiary force were posted about halfway between Poona and Ahmadnagar, on the river Ghod near the village of Sirur. Some time before 1813 a quarrel, which seems to

have been stirred up by Bajirav, broke out between Khusruji the resident's agent and Sadashiv Mankeshvar one of Bajirav's ministers. Khusruji had received from the Peshwa the valuable post of sarsubhedar or governor of the Maratha Karnatak. Sadashiv Mankeshvar who coveted this appointment accused Khusruji of mismanagement, and Mr. Elphinstone told Khusruji that he must choose between his agency at the residency and his government. Khusruji chose the residency agency and his appointment as governor of the Karnatak was given to Trimbakji Denglia one of Bajiravs chief favourites. This Trimbakji, after wards the main cause of Bajirav's fall, was originally a spy who had risen to notice by the speed with which he brought Bajirav an answer from Poona when (1802) he was at Mahad in Kolaba in flight from Holkar. Trimbakji continued a most active useful and unscrupulous servant to Bajiray, supple in adopting his master's views and bold in carrying them out. He boasted that he was ready to kill a cow if his master told him. He was perhaps the only man who ever gained Bajirav's confidence, as he was too low to be feared too despicable to excite jealousy, and too servile to irritate by opposition. [Colebrooke's Elphinstone, II. 288, 293.] Bajiravs success against his southern estateholders led him to speak vaguely of enforcing his claims on the Nizam, Sindia, and the Gaikwar. At this time Bajiray apparently had no thought of acting against the British Government. It was Trimbakji's bitter hatred of Europeans which succeeded in flattering Bajirav into the belief, that, if he only steadily added to his army, he might in time be able to make himself independent of the English. Accordingly the Peshwa began systematically to strengthen his force, chiefly engaging Gosavi and Arab infantry. Mr. Elphinstone raised no objection. On the contrary he was anxious to see the Peshwa's force strengthened, so that they could more effectually resist the attacks of the Pendharis who were now causing great loss in many parts of the Deccan. [In 1816 (27th November) Pendharia were plundering within fifteen miles of Poona and driving the people into Poona. Colebrooke's Elphinstone, I 343, 346.1 At this time Khusruji exercised an evil influence on the Peshwa by constantly enlarging on the great gains which the British Government had received from the treaty of Bassein. Mr. Elphinstone was aware of Khusruji's views, determined to remove him, and made a liberal provision for him in Gujarat. As he was leaving Poona Khusruji died of poison. Though a searching inquiry was made it remained doubtful whether Khusruji committed suicide, as he knew his corrupt practices would become public as soon as he left Poona, or whether he was poisoned by Trimbakji at Bajiravs suggestion because Khusruji knew too many of their secrets. In 1815 Trimbakji, who continued to rise in favour with Bajiray, was made agent in the affairs with the

British Government. Trimbakji studied his master's humours and gained entire ascendancy over his mind. His measures, though ignorant violent and treacherous, were vigorous. His punishments were at once lenient and severe Robbery and murder might be compensated by a fine; a failure in a revenue contract was an unpardonable offence. The Peshwa farmed his districts to the highest bidder. Those who failed in their contracts had to give up their whole property and that of their securities. If their whole property was insufficient they were thrown into hill-forts and treated with the greatest rigour. Bajirav's net revenue was about £1,200,000 (Rs. 120 lakhs) out of which he saved about £500,000 (Rs. 50 lakhs) a year. In 1816 he was believed to have collected £5,000,000 (Rs. 5 krors) of treasure. [Grant Daff's Marathas, 625. General Briggs says (Colebrooke's Elphinstone, I. 303): Out of a yearly revenue of a million and a half sterling Bajirav laid by half a million. In 1816-17 he must have had at his disposal upwards of eight millions of treasure in jewels and in specie. Bajiray court was gay and licentious beyond that of any former Peshwa, a characteristic agreeable to most Poona Brahmans. His time was passed in the practice of gross debauchery and of religious rites. He claimed great holiness and was most careful to keep all religious rules and ceremonies. Apparently to lay the ghost of Narayanray Peshwa, whom his parents had murdered and who seems to have haunted him, Bajirav planted several hundred thousand mango trees about Poona, gave largesses to Brahmans and religious establishments, and was particularly generous to Vithoba's temple at Pandharpur. [The suggestion offered in the text to explain the planting of the mango groves may seem to differ from the usual explanation that the mangoes were planted to atone for the crime and to gain purity or punya. The suggestion that the atonement and purity Bajirav sought was freedom from the haunting of a ghost or unclean spirit is based on the following considerations: The mango is one of the holiest, that is the most effective spirit-scarers, among Hindu trees. That the object of planting the mango groves was to keep Narayanrav's ghost at a distance is supported by the story told by Grant Duff (Marathas, 625) that one of Bajirav's religious advisers saw Narayanrav's ghost and that it ordered a dinner for 100,000 Brahmans, an entertainment which was at once provided. Two passages in Mackintosh's account of the Mahadev Kolis of Ahmadnagar (1836 Trans. Bom. Geog. Soc. I. 223 and 256) further support the view taken in the text. The Kolis at times pay divine honours to persons who have died a violent death particularly if they or their ancestors caused the death. They pay these honours to the spirit of the murdered man to win its favour and that the past may be forgotten. The second passage shows that the Maratha Brahmans in Bajirav's time held the same views as the Kolis

about ghost-haunting. In 1777 Balvantray Bede, the brother-in-law of Nana Fadnavis, treacherously seized and killed five Koli outlaws at Junnar. After the execution of the Kolis Balvantray became very unhappy. He lost all peace of mind. To regain his tranquillity he built a temple near Junnar, and, in it, as the object of worship, set five stones or panch lings representing the five Kolis whom he had executed, that is the ghosts of the five Kolis haunted Balvantray and he set up these stones as houses for the ghosts that they might be pleased with the civility shown them, live in the stones, and give over troubling him. It was probably Narayanrav's ghost that so often took Bajirav to Pandharpur. It was also apparently to get rid of this same ghost that Raghunathrav passed through the holed stone in Malabar Point in Bombay whose quardian influence cleansed the passer through from sin, that is freed him from ghosts. Compare Moore's Oriental Fragments, 506.1 He never listened to his people's complaints. If villagers tried to approach him, his attendants drove them off. The revenue-farmers had generally the superintendence of civil and criminal justice and these powers enabled them to increase their collections. The court of justice at Poona was so corrupt that a suitor without money or influence never won a case. In 1815 the Peshwa continued to send agents to Sindia and Bhonsla and for the first time sent agents to Holkar and the Pendharis. These agents were sent with the object of forming a league to prevent any aggression on the part of the British, or to take advantage of any reverse in the Nepal (1815) or other war which might weaken the British and give the leaguers the chance of shaking off their power. Bajirav had no definite plans. Still he had gone so far that his intrigues would have justified the English in depriving him of power. From time to time Bjirav spoke to Mr. Elphinstone of the necessity of settling his claims on the Nizam and on the Gaikwar. Mr. Elphinstone was at all times ready to arrange for an inquiry, but Bajiray always let the subject drop. At heart be had no wish to have his claims settled; if his claims were settled his chief opportunity of intriguing with the Nizam and the Gaikwar would cease. At last in 1815, as part of a scheme to establish his ascendancy over Gujarat, he again pressed an adjustment of his claims on the Gaikwar. The Governor General thought it advisable to let the two states settle their affairs by direct negotiation, and that the British Government should not arbitrate unless the states failed to agree. At an early stage in the discussion an agent of the Gaikwar named Gopalrav Mairal had been sent to Poona. The claims of the Gaikwar and the peshwa were very intricate, and, when Bajirav, adopting Trimbakji's policy determined for purposes of intrigue to keep open the discussion no progress was made. For the intrigues which Bajirav hoped to develop

out of these discussions Gopalrav Mairal, who was upright sensible and cautious, was unsuited.

Gangadhar Shastri at Poona 1815.

In 1814 the Peshwa asked that another agent should be sent both to adjust the accounts and to gain a renewal of the lease of the Peshwa's share of Gujarat. The Gaikwar's new agent was Gangadhar Shastri. Gangadhar Shastri had originally been in the employment of the Phadke family in Poona. He had gained a place at Baroda through Fatesing Gaikwar, had proved of the greatest service to Colonel Walker in settling the claims of the Gaikwar on his feudatory chiefs, and had recently been the leading man at Baroda. [Mr. Elphinstone (15th June 1814) describes Gangadhar Shastri as a person of great shrewdness and talent who keeps the whole state of Baroda in the highest order, and, at Poona, lavishes money and marshals his retinue in such style as to draw the attention of the whole place, Though a learned Sanskrit scholar he affects the Englishman, walks fast, talks fast, interrupts and contradicts, mixes English words with everything he Bays, and calls the Peshwa and his ministers old fools and dam rascal. Colebrooke's Elphinstone, I. 275. So strong was the distrust of Bajiray and the dread of Trimbakji that the Gaikwar asked and obtained the formal guarantee of his minister's safety from the British Government. On a previous occasion in 1811, Bajirav had approved of Gangadhar Shastri's appointment. Since then he had heard from his supporters in Baroda that Gangadhar Shastri was a friend to the English. In 1814 when Gangadhar Shastri was again proposed as the Gaikwar's agent, Bajirav objected, stating that when he was a clerk under Phadke, the Shastri had once been insolent to him. As Bajirav had not raised this objection in 1811, Mr. Elphinstone refused to attach any weight to it. In 1815, as Gangadhar Shastri found that his negotiations with the Peshwa must end in nothing, with Mr. Elphinstone's approval, he determined to return to Baroda and leave the settlement to British arbitration. This determination produced a sudden change on Bajirav and Trimbakii. If these questions were left to Mr. Elphinstone all excuse for correspondence between the Peshwa and the Gaikwar would cease and intrigue against the English would be made most difficult and dangerous. At any cost Gangadhar Shastri must be won to their interests. Gangadhar Shastri's weak point was vanity. Trimbakji told him what an extremely high opinion Bajirav had formed of his talents from the ability with which he had supported the Gaikwar's interests. The Peshwa was most anxious to get Gangadhar Shastri into his service. He must not leave Poona at once. This was followed by marked friendliness on Bajirav's part, even by the offer of his sister-inlaw in marriage to Gangadhar Shastri's son. Bajirav also agreed to an adjustment of the Peshwa's claims on the Gaikwar which Gangadhar Shastri proposed. The marriage preparations were pushed on. But as no answer came from the Gaikwar to the proposed settlement Gangadhar Shastri began to fear that his master suspected that this offer of marriage had won him to the Peshwa's side. Gangadhar Shastri hesitated about the marriage and much to Bajirav's annoyance it was put off. He further enraged Bajirav by refusing to allow his wife to visit the Peshwa's palace because of the bauchery from which it was never free. Still Trimbakji continued more cordial and friendly than ever. In July (1815) Bajirav asked Gangadhar Shastri to go with him on a pilgrimage to Pandharpur. Contrary to Gopalrav Mairal's advice Gangadhar Shastri went. On the 14th of July Gangadhar Shastri dined with the Peshwa. In the evening Trimbakji asked him to Vithoba's temple where the Peshwa was.

Gangadhar Shastri Murdered, 1815.

Gangadhar Shastri went and found the Peshwa most gracious and pleasing. He left the temple in high spirits, and before he had gone 300 yards, was attacked and killed. The heinousness of this crime, the murder of a Brahman in holy Pandharpur, raised a strong feeling against the murderers. Gopalrav Mairal openly accused Trimbakji, and Mr. Elphinstone, after a long inquiry, proved that Trimbakji had hired the assassins. Bajirav was called on to give up Trimbakji to the British Government. He put Trimbakji under arrest but refused to surrender him. British troops were moved on Poona, Bajirav's heart failed him, and Trimbakji was surrendered on the 25th of September. Sitaram the Baroda minister, who was in the Peshwa's pay, had helped Trimbakji's plans for murdering Gangadhar Shastri. Between the time of Gangadhar Shastri's murder and Trimbakji's surrender Sitaram busied himself in raising troops. He was taken into custody by the Resident at Baroda much against the will of the regent Fatesing Gaikwar whose conduct showed that like Sitaram he had become a party to Bajirav's intrigues against the British. Trimbakji was confined in the Thana fort. In the evening of the 12th of October he escaped and reached a safe hiding place in the Ahmadnagar hills. [Grant Duff's Marathas, 632.]

Bajirav's preparations for 1816.

After the surrender of Trimbakji Bajirav's chief advisers were Sadashiv Bhau Mankeshvar, Moro Dikshit, and Chimnaji Narayan. The two last were Konkanasth Brahmans, who, like most of Bajrav's courtiers, had gained their prince's favour by their families' dishonour. The agent

between Bajirav and Mr. Elphinstone was Captain Ford the commandant of the Peshwa's regular brigade. Trimbakji's escape seemed to restore Bajirav's good humour and he continued on the most cordial terms with Mr. Elphinstone. He was now busier than ever organising a league aginst the English. With Sindia, Holkar, the Raja of Nagpur, and the Pendharis constant negotiations went on. He greatly added to the strength of his army and supplied Trimbakji with funds to raise the Bhils, Kolis, Ramoshis, and Mangs of Khandesh Nasik and Ahmadnagar. Other gangs were organised in different parts of Bajirav's territories, which, if they attracted Mr. Elphinstone's notice, were instructed to play the part of Pendharis or insurgents (1817). Mr. Elphinstone had exact knowledge of what was going on. He sent word to the minister that a large body of troops was assembled at Nataputa, a village south of the Nira and within fifty miles of Poona. Were these troops the Peshwa's or were they insurgents? The minister replied that the Peshwa had no troops in that part of the country, and that Bapu Gokhla's horse had been sent against the insurgents. When Gokhla's horse reached the Nira they camped among the insurgents and could hear nothing of them. [Grant Duff's Marathas, 632-633.] Still Mr. Elphinstone persisted that a large insurrection was on foot in that part of the country, and Bajirav asked him to take his own measures to suppress it. Colonel Smith, who commanded the Poona subsidiary force, marched to the Nira, the insurgents moved to Jat, Colonel Smith followed them, and they retired north through a little known pass in the Mahadev hills to join a second body of insurgents which had gathered in Khandesh under Trimbakji's relative Godaji Denglia. Before the arrival of the Nira insurgents Godaji's troops had been dispersed by Lieutenant Evan Davis with a body of the Nizam's horse. Bajirav could no longer deny there were insurgents. He ordered the chief of Vinchur in Nasik to act against them, and, soon after, forwarded a letter from the Vinchur chief, giving fictitious details of a defeat of the insurgents Meanwhile Bajirav continued to levy both infantry and cavalry Mr. Elphinstone warned him of the danger he was running and asked him to stop. Bajirav in reply assumed a peremptory tone, demanding whether Mr. Elphinstone meant war or peace Mr. Elphinstone directed Colonel Smith to move towards Poona. with the light division and told Bajirav that he had called Colonel Smith to his support. Affairs were urgent. The insurgents were making head in Khandesh; May was already begun; and Bajirav might retire to a hill fort and during the rains organize a general rising of all the Maratha powers. Disturbances in Katak prevented communication between Poona and Calcutta. But a private letter from the Governor General reached Mr. Elphinstone advising him to make the surrender of Trimbakji a preliminary to any arrangement he might come to with

Bajirav. Mr. Elphinstone determined to act without delay. At the Peshwa's desire he visited him and Bajiravs persuasiveness and the soundness of his arguments would have convinced any one to whom the facts were not known that he could not possibly be unfriendly to the English. While Baijray's acts contradicted his words Mr. Elphinstone was not to be deceived. He warned Bajiray of the dangers he had brought on himself, and told him that unless Trimbakji was either given up or driven out of the Peshwa's territory, war with the English must follow. Several days passed without an answer from Bajirav Then Mr. Elphinstone formally demanded the surrender of Trimbakji within a month and the immediate delivery of the three hill forts of Sinhgad and Purandhar in Poona and Raygad in Kolaba as a pledge that Trimbakji would be surrendered. Bajirav had an exaggerated idea of the importance of his friendship to the English. He believed Mr. Elphinstone would not go to extremities and he hoped he might tide over the few weeks that remained till the fighting season was past. On the 7th of May Mr. Elphinstone sent word, that, in case Bajirav did not agree to hand over the three forts in pledge of Trimbakji's surrender, Poona would be surrounded. At one o'clock in the morning of the 8th Bajirav sent a messenger in the hope that Mr. Elphinstone might be pursuaded not to surround the city. The discussion lasted all night; day had dawned before the messenger told Mr. Elphinstone that Bajirav agreed to hand over the three forts. The troops were already moving round the city, and had completely surrounded it before Mr. Elphinstone reached the head of the line. As soon as Bajiray issued an order for the surrender of the forts the troops were withdrawn. The Peshwa, as if he at length had resolved to give up his favourite, issued a proclamation offering £20,000 (Rs. 2 lakha) and a village worth £100 (Rs. 1000) a year, to any one who would bring in Trimbakji dead or alive. He sized some of Trimbakji's adherents and sequestrated the property of others who were concerned in the insurrection. Though these proceedings deceived neither his own subjects nor Mr. Elphinstone, they were taken as the preliminary concessions without which the English could entertain no proposals for the future relations between the two states. Two days later (10th May 1817) Mr. Elphinstone received instructions from the Governor General, the Marquis of Hastings, which were framed with the object of preventing Bajirav again organising or taking part in any combination against the English.

Treaty of Poona 13th June 1817.

Under these instructions Mr. Elphinstone drew up the treaty of Poona which was signed by Bajirav on the 13th of , June 1817. In this treaty

Bajirav admitted that Trimbakji . murdered Gangadhar Shastri; he agreed to have no correspondence with any foreign power that is with any other state; he renounced all rights to lands beyond the Narbada on the north and the Tungbhadra on the south; he agreed to receive a yearly payment of £40,000 (Rs. 4 lakhs) as a settlement of all his claims on the Gaikwar; to cede to the English the fort of Ahmadnagar; and instead of the contingent of 5000 horse and 3000 foot which he furnished under the treaty of Bassein to cede to the English territory yielding a yearly revenue of £340,000 (Rs. 34 lakhs). [This territory included Dharwar and other parts of the Karnatak, the North Konkan, and the Peshwa's revenue in Gujarat. Grant Duff's Marathas, 685] Bajirav disbanded a number of his horse, but it was found that each self-horsed trooper had received eight months' pay and had promised to attend if summoned and to bring friends. The Peshwa's regular battalions were transferred as part of the force which the English were to keep up in return for the fresh grant of territory. Only one battalion under Captain Ford was kept in the Peshwa's pay, and in their stead, the English raised a new corps. In July 1817, when the arrangements under the treaty of Poona were adjusted Bajirav left Poona on his yearly pilgrimage to Pandharpur.

At this time (1816-1818), under the Marquis of Hastings (1814-1823), the whole power of the British in India was set in motion to crush the Pendharis, a horde of robbers, who, under the patronage of Sindia, Holkar, and the Peshwa, and under the shadow of the weak policy which had paralysed the English since the close of the Marquis of Wellesley's government (1805), bad risen to dangerous strength and spread unrest and ruin over Malwa, Central India, and much of the British possessions. During 1816 and the early months of 1817 the Marquis of Hastings determined, besides suppressing the Pendharis whose head-quarters were in Malwa and Central India, to enter into fresh treaties with the power of Rajputana and Central India whose relations with the British Government and with each other had remained unsatisfactory since 1805. At the same time he determined to put an end to the great Maratha league whose head was the Peshwa and whose chief members were the Bhonsla of Nagpur, Sindia, and Holkar.

As a part of the Marquis of Hastings' great scheme, at the close of the rains (October 1817), all available British forces were to be sent from the Deccan to Malwa. The intention of moving the English troops northwards was not kept secret, and, when Bajirav came to know of it, he determined not to miss the chance which it gave him of being revenged on Mr. Elphinstone. Part of the arrangement for the Pendhari

and Central India campaign was the appointment of Sir John Malcolm as Political Agent with the army of the Deccan. With his usual vigour, before moving north to Malwa, Sir John Malcolm visited all the Residents and native courts in the Deccan. When Sir John Malcolm reached Poona in August Baijray was at Mahuli, the sacred meeting of the Vena and the Krishna in Satara. He asked Sir John Malcolm to visit him at Mahuli and Sir John Malcolm went. Bajirav complained of his crippled state under the treaty of Poona and of the loss of the friendship of the English, and declared his longing to have the friendship renewed. Sir John Malcolm advised him to collect troops, and, in the coming war with the Pendharis, to show his loyalty by sending a contingent to the English aid. Bajirav warmly approved of this plan, and spoke with such cordiality, candour, and sense that Sir John Malcolm went back to Mr. Elphinstone satisfied that all that was wanted to make Bajiray a firm ally of the English was to trust him and to encourage him to raise troops. Mr. Elphinstone told Sir John Malcolm that in his opinion to trust Bajirav and to let him raise troops were end in making him not a fast ally of the English but their open foe. Still though this was his opinion he would not oppose Sir Joan Malcolm's scheme. In August Bajirav received back Sinhgad, Purandhar, and Raygad. He stayed at Mahuli till the end of September doing his best, as he had promised Sir John Malcom, to collect a strong army. Bajirav's chief adviser was Bapu Gokhla a brave soldier of much higher position and character than Trimbakji Under Gokhla's influence Bajirav behaved with generosity to make of his great vassals restoring their lands and striving to make himself popular. Perhaps because he knew that no one trusted him he bound himself under a writing and by an oath to be guided by Bapu Gokhla. To meet the expense of his preparations Bajirav gave Gokhla £1,000,000 (Rs. one kror). Forts were repaired, fevies of Bhils and other hill tribes arranged, and missions sent to Bhonsla, Sindia, and Holkar. The part of the scheme which Bajirav liked best, and whose working he kept in his own hands, was the corruption of the English troops and officers and the murder of Mr. Elphinstone. Yashvantrav Ghorpade, a friend of Mr. Elphinstone's and of many British officers, was at this time in disgrace with Mr. Elphinstone on account of some intrigues. Under an oath of secrecy Bajirav induced Yashvantrav to undertake to buy over the British officers, and to this., on the advance of £5000 (Rs. 50,000) Yashvantrav agreed, and kept his vow of secrecy with such care that he never mentioned Bajirav's scheme to a soul. Yashvantrav had a great regard for Mr. Elphinstone. It was to Yashvantrav and to a Brahman named Balajipant Natu that Mr. Elphinstone owed his knowledge of Bajirav's plans, The Peahwa returned to Poona at the end of September. Reports of attempts to corrupt the British sepoys

came from all sides, and there was the still graver danger that Bajirav would influence others by threatening to persecute their families, many of whom lived in his South Konkan territories. Bajirave plan was to ask Mr. Elphinstone to a conference and murder him, but to this Bapu Gokhla would not agree.

On the 14th of October Mr. Elphinstone and Bajirav met for the last time. Bajirav spoke of the loss he suffered under the treaty of Poona. Mr. Elphinstone told him that his only chance of regaining the goodwill of the English was to lose no time in sending his troops north to aid the English in putting down the Pendharis. Bajirav assured him that his troops would start as soon as the Dasara was over. Dasara Day fell on the 19th of October. It was the finest military spectacle since the accession of Bajirav. During the day two incidents showed the ruling feelings in Bajirav's mind; he openly slighted Mr. Elphinstone and he ordered a mass of his horse to gallop down on the British troops as if to attack and then to wheel off. The next week (19th-25th October) was full of interest. By night and day parties of armed men kept flocking into Poona from all sides. General Smith's force was now close to the Chandor hills in Nasik, too far to help Mr. Elphinstone, and the European regiment which was on its way from Bombay could not reach Poona for ten days. The British troops at Poona were Cantoned to the north of the town. Gardens and hedges in many places led within half musket shot of the lines offering every help to attacking Arabs or to disloyal sepoys. First small parties, then large bodies of the Peshwa's troops came out and settled round the British. lines. Vinchurkar's horse with some infantry and guns camped to the west of the residency between it and Bhamburda village. The Peshwa was urged to strike before reinforcements could reach Mr. Elphinstone. On the night of the 28th of October the guns were yoked, the horses saddled, and the infantry ready to surprise the British lines. But Bajirav's force was daily increasing; his intrigues with the sepoys were not completed: there was still time for delay. Next day (29th October) Mr. Elphinstone complained to the Peshwa of the crowding of the Maratha troops on the British lines. When the message was received Bapu Gokhla was for instant attack. But the arguments of the night before again prevailed, the Peshwa's schemes were not yet completed, the European regiment was, he believed, still far distant, and every hour the Maratha army was growing. At four next afternoon (3th October) the European regiment after great exertions reached the cantonment. Next day (1st November), except 250 men who were left to guard the residency, Mr. Elphinstone moved the troops to a good position at the village of Kirkee four miles north of Poona This movement gratified Bajirav as he took it for a sign of fear. The British, cantonment was plundered and

parties of troops continued to push forward as if in defiance. Bajirav let three days more pass to allow the Patvardhans and his other Karnatak feudatories to join his army. Meanwhile General Smith, warned how matters stood at Poona, had ordered his light battalion to fall back on Sirur about forty miles north-east of Poona. On the 3rd of November Mr. Elphinstone directed the light battalion and part of the auxiliary horse to move from Sirur to Poona. When Bajirav heard that these troops had been summoned he determined to delay no longer.

Battle of Kirkee, 5th November 1817.

The strength of the two forces was, on the English side, including Captain Ford's battalion which was stationed at Dapuri about four miles west of Kirkee, 2800 rank and file of whom about 800 were Europeans. The Maratha army, besides 5000 horse and 2000 foot who were with the Peshwa at Parvati, included 18,000 horse and 8000 foot, or 33,000 in all. Mr. Elphinstone had examined the ground between the British head-quarters at Kirkee and Captain Ford's encampment at Dapuri. The two villages were separated by the river Mula, but a ford was found which Captain Ford's three six-pounders could cross. Mr. Elphinstone arranged that in case of attack Captain Ford should join Colonel Burr's brigade, and explained to all concerned that at any hazard they must act on the offensive. In the afternoon of the fifth Bajirav's army poured out of Poona, everything hushed but the trampling and the neighing of horses, till, from the Mutha to the Ganesh Khind hills, the valley was filled like a river in flood. [Colebrooke's Elphinstone, I. 383; Forrest's Elphinstone, 50.] The residency was left and was at once sacked and burned, and Mr. Elphinstone retired to join the troops at Kirkee. A message to advance was sent to Colonel Burr who moved towards Dapuri to meet Captain Ford's corps; the corps united and together pushed on to the attack. Amazed by the advance of troops whom they believed bought or panic-struck, the Maratha skirmishers fell back, and the Maratha army, already anxious from the ill-omened breaking of their standard, began to lose heart. Gokhla rode from rank to rank cheering and taunting, and opened the attack pushing forward his cavalry so as nearly to surround the British. In their eagerness to attack a Portuguese battalion, which had come up under cover to enclosures, some of the English sepoys became separated from the rest of the line. Gokhla seized the opportunity for a charge with 6000 chosen horse. Colonel Burr who saw the movement recalled his men and ordered them to stand firm and keep their fire. The whole mass of Maratha cavalry came on at speed in the most splendid style. The rush of horse, the sound of the earth, the waving of flags, and the brandishing of spears

was grand beyond description but perfectly ineffectual. The charge was broken by a deep morass in front of the English. As the horsemen floundered in disorder the British troops fired on them with deadly effect. Only a few of the Maratha horse pressed on to the bayonets, the rest retreated or fled. The failure of their great cavalry charge disconcerted the Marathas. They began to drive off their guns, the infantry retired, and, on the advance of the British line, the field was cleared. Next morning the arrival of the light battalion and auxiliary horse from Sirur prevented Gokhla from renewing the attack. The European loss was sixty-eight and the Maratha loss 500 killed and wounded. [Details of the battle of Kirkee are given under Kirkee, Places of Interest. Blacker in his Maratha War (65-69) passes over Mr. Elphinstone's share in the victory of Kirkee. There is no doubt that Mr. Elphinstone planned and won the battle. Canning in the House of Commons said: In this singular campaign Mr. Elphinstone displayed talents and resources which would have rendered him no mean Mural in a country where generals are of no mean excellence and reputation. Forrest's Elphinstone, 55; compare Colebrooke'e Elphinstone, II. 127.] On the evening of the 13th General Smith arrived at Kirkee. Since the 5th the Peshwa's army had received the important reinforcements he had been expecting from the Patvardhans and other southern feudatories. They moved from the city and took their position with their left on the late British cantonment at Garpir and their right stretching some miles east along the Haidarabad road. About sunset on the 16th General Smith threw an advanced quard across the river to take a position to the east of the Peshwa's army at the village of Ghorpadi. The British troops were met by a body of the Peshwa's infantry, but, after a severe struggle, they gained their position. During the night they were not molested and next morning the Peshwa's camp was empty. Bajirav had fled to Satara.

Poona Surrendered, 17th November 1817.

During the day Poona was surrendered. The greatest care was taken to protect the peaceable townspeople and order and peace were soon established. On the 22nd of November General Smith pursued Bajirav to Mahuli in Satara, from Mahuli to Pandharpur, and from Pandharpur to Junnar, among whose hills Bajirav hoped that Trimbakji would make him safe. At the end of December, finding no safety in Junnar, Bajirav fled south towards Poona. Colonel Burr who was in charge of Poona, hearing that the Peshwa meant to attack the city, sent to Sirur for aid. The second battalion of the 1st Regiment, under the command of Captain Staunton, started for Poona at eight at night on the 31st of December. They were 500 rank and file with 300 irregular horse and

two six-pounder guns well-manned by twenty-four European Madras artillerymen under a sergeant and a lieutenant.

THE BRITISH (1817-1884.)

Fight at Koregaon, 1st January 1818.

On reaching the high ground above the village of Koregaon, about ten in the morning of the first of January 1818, the battalion saw the Peshwa's army of 25,000 Maratha horse on the eastern bank of the Bhima. Captain Staunton continued his march and took possession of the mud-walled village of Koregaon. As soon as the Marathas caught sight of the British troops they recalled a body of 5000 infantry which was some distance ahead. The infantry soon arrived and formed a storming force divided into three parties of 600 each. The storming parties breached the wall in several places especially in the east, forced their way into the village, and gained a strong position inside of the walls. Still in spite of heat, thirst, and terrible loss the besieged held on till evening, when the firing ceased and the Peshwa's troops withdrew. Next morning Captain Staunton retired to Sirur. His loss was 175 men killed and wounded including twenty-one of the twenty-four European artillery men. About one-third of the auxiliary horse were killed, wounded, or missing. The Marathas lost five or six hundred men. [Details of this famous fight are given under Koregaon, Places of Interest. During the whole day Bajirav sat about two miles off, watching 800 British troops keep 30,000 Marathas at bay. In his annovance he upbraided his officers Gokhla, Apa Desai, and Trimbakji all of whom directed the attacks: You boasted you could defeat the English; my whole army is no match for one battalion of them. From Talegaon Bajirav fled to the Karnatak. He found it in Major Munro's hands and turned north, avoiding his pursuers by the skill of Gokhla. While the pursuit of Bajirav was going on the Marguis of Hastings had ordered Mr. Elphinstone to take over the whole of the Peshwa's possessions, except a small tract to be set apart for the imprisoned chief of Satara.

Satara Proclamation, 10th February 1818.

Satara fort was taken on the tenth of February 1818, and a proclamation was issued that for his treachery the Peshwa's territories had passed to the British. The proclamation promised that no religion should be interfered with and that all pensions and allowances should be respected, provided the holders withdrew from Bajirav's service Nothing was said about service estates or *jagirs*. It was soon

understood that they would be confiscated or continued according as the holders showed readiness in tendering allegiance to the new government.

Before the country could be settled Bajirav had to be caught and his hill-forts to be taken. On the 14th of February Brigadier General Pritzler marched from Satara by the Nira bridge to Sinhgad. The siege was begun on the 24th of February and on the 2nd of March, after 1417 shells and 2281 shot had been spent, the garrison of 700 Gosavis and 400 Arabs hold out a white flag and next day surrendered the fort. From Sinhgad General Pritzler marched to Purandhar which was surrounded by the 11th of March. A mortar battery was opened on the 14th and on the 15th a British garrison occupied the neighbouring fort of Vairagad. As Vairagad commands Purandhar, the Purandhar garrison at once surrendered, and the British colours were hoisted on the 16th. In the north Colonel Deacon, on the 20th of February, after taking some places in Ahmadnagar, came to Sirur. On the 25th he reached Chakan, but, in spite of its strength, the garrison held out for only one day surrendering on the 26th. The British loss was four Europeans killed and wounded. After Chakan Colonel Deacon's detachment went to Lohogad and Isapur. At Lohogad there was already a besigging force under Colonel Prother who had reached Lohogad on the 4th of March from the Konkan by the Bor pass. Isapur was taken without resistance on the 4th, and on the 5th Lohogad was surrendered before the battery guns were placed in position. Tung and Tikona in Bhor immediately surrendered and Rajmachi was occupied without resistance. Koari, a place of importance commanding a pass, was attacked or the 11th. On the 13th a fire broke out and. on the 14th a magazine exploded and the garrison of 600 surrendered. The dependent fort of Ganga was occupied on the 17th. On the fall of Koari the troops returned to Poona. A fourth detachment under Major Eldridge on the 24th of April marched to Junnar which they found empty. They then took Chavand, Jivdhan, Hadsar, Narayangad, and Harishchandragad near the Poona-Ahmadnagar boundary. Of these Chavand and Jivdhan alone made a show of resistance. Chavand was bombarded on the first of May and next morning after 150 shells had been thrown the garrison of 100 men surrendered. Jivdhan, close to the Nana Pass was attacked on the third of May, and surrendered after an hour's firing. This completed the capture of the Poona forts. [Pendhari and Maratha War, 294-316. Details are given under Places.]

About the middle of February, after the fall of Satara, General Smith went in pursuit of the Peshwa who was at Sholapur. After several forced marches General Smith came in sight of the Marathas at Ashta

about fifteen miles north of Pandharpur. The Peshwa taunted Gokhla with the success of his arrangements for preventing his master being surprised. Gokhla vowed that at least the approach to him would be well guarded. He waited with 500 horse for the English cavalry, attacked them as they passed out of a river bed, caused some loss and confusion but was killed and the Marathas put to flight. The Raja of Satara and his mother and brothers, to their great joy, were rescued from Bajirav's power. This surprise and defeat and the death of Gokhla upset the Maratha plans and did much to hasten submission. Bajirav fled to Kopargaon in Ahmadnagar, and from Kopargaon to Chandor in Nasik. From Nasik he passed into the Central Provinces, where, on the banks of the Vardha he was defeated and his troops dispersed. From the Vardha he tried to pass north to Sindia. At last from Dholkot near Asirgad he sent to Sir John Malcolm an offer of surrender, and on the 3rd of June surrendered and received a maintenance of £80,000 (Rs. 8) lakhs) a year. [Grant Duff's Marathas, 674-5. In the amount of the maintenance and in some other stipulations Sir John Malcolm showed that, in spite of the lesson he had learned at Mahuli, he was unable to resist Bajirav's fascinations. Bajirav died at Bithur in 1851.]

By the end of May the Poona force was divided between Sirur, Junnar, and Poona. At Sirur were stationed the head-quarters of the force, the head-quarters of the cavalry brigade and horse artillery, the remains of the foot artillery. His Majesty's 65th Regiment, the light battalion and the right wing of the 1st battalion of the 7th Bombay Native Infantry. At Junnar were placed one battalion of Bombay Native Infantry, two six-pounders, and a party of Captain Swanston's Horse. At Poona city and cantonment were placed details of Artillery and Pioneers, one Regiment of Light Cavalry, one European Regiment, and three battalions of Bombay Native Infantry. [Blacker's Maratha War, 315, 316.]

To the management of the city of Poona and the tract which lay between the Bhima and the Nira, Mr. Elphinstone, who had been named sole Commissioner to settle the conquered territory, appointed Captain Henry Dundas Robertson Collector, Magistrate, and Judge. The north of the conquered territory, now including North Poona Ahmadnagar and Nasik, which stretched between the Bhima river and the Chandor hills, was entrusted to Captain Henry Pottinger. With each of these officers, whose authority corresponded to that of the Peshwa's sarsubhedars, experienced natives were appointed to numerous subordinate situations on liberal salaries. To restore order in the country, to prevent the revenue being turned to hostile, purposes, to guard and to please the people, and to improve not to change the

existing system were the first objects to which Mr. Elphinstone directed the Collectors' attention. As almost all the British troops were either pursuing the Peshwa or taking the western forts the Collectors' power of restoring order was at first small. Still by raising irregulars something was done to reduce the smaller places and destroy straggling plunderers. Mr. Elphinstone's great object was to learn what system was in force and to keep it unimpaired. He was anxious to stop people making laws for the country before they knew whether the country wanted laws. [Colebrooke's Elphinstone. II. 46.] In 1819 Mr. Elphinstone made arrangements for obtaining a knowledge of local customs and laws. Inquiries were circulated to all persons of known intelligence. A mass of valuable information was gathered, and, from the judicious nature of the questions, the inquiry tended to gain the confidence. of the people rather than to arouse their suspicions. To prevent insurrection, to settle claims and rewards, to provide for all who had suffered, and to better the condition of those who were worthy of favour were among the duties which devolved on the Commissioner. At first to prevent disorders or risings a strict system of private intelligence, which was agreeable to Maratha ideas of government, was kept up. Armed men travelling without pass-ports were forced to lay down their arms, and the hoarded resources of the late government were seized wherever they were found After the first year Mr. Elphinstone was able to relax these rules. No passport was required except from armed bodies of more than twenty-five men, and no search for treasure was allowed unless there was good reason to believe that the information regarding it was correct. A strong military force held positions at Poona, Sirur and Junnar, and numbers of the enemy's irregular infantry were employed in the British service. The ranks of the auxiliary horse were already filled by men enlisted beyond the borders of the Maratha country, but more than half the horses which returned from Bajirava army died in the course of six months from the fatigue they had undergone. Few attempts at insurrection occurred. One conspiracy was detected which had for its object the release of the pretended Chitursing, the murder of all the Europeans at Poona and Satara, the surprise of some of the principal forts, and the capture of the Raja of Satara. The conspirators were men of desperate fortunes among the unemployed soldiery; many of them were apprehended and tried, and the leaders, some of whom were Brahmans, were blown from guns. This example had an excellent effect in restraining conspiracies. Except service-estates or jagirs, which could not be continued on the former basis of supply-ing contingents of troops, every species of hereditary right, all established pensions, charitable and religious assignments, and serviceendowments were continued. Regarding the service-estates or jagirs

many points required consideration. In the first instance, unless specially exempted, every service estate or *jagir* was taken possession of in the same way as the territory in the immediate occupation of the Peshwa's agents. Estates which had been sequestrated by the Peshwa were not restored. Some of the estateholders had established claims by their early submission or by former services to the British Government. The rest might justly be granted a suitable maintenance but could have no claim to the estates which they formerly held on condition of furnishing troops. Liberal pensions in land or money were granted to those who had aided the British Government during the revolution. The ministers of the late government and of the time of Nana Fadnavis who were wholly unprovided with means of living received life allowances. Mr. Elphinstone was anxious to maintain the sardars or gentry and nobles in the position they had held under the Peshwa. To deprive them of all signs of rank would be felt as oppressive by the upper classes and would be disapproved as unusual by the lower orders. The chiefs were classed according to their rank and the estimation in which they were held under the former government. They were freed from the immediate jurisdiction of the civil court, an appeal being allowed from the Agent to Sardars in Poona to the Governor in Council or to the Sadar Court. [Colebrooke's Elphinstone, II. 62,75.1 The jury or panchayat was the ordinary tribunal for the decision of civil suits. The criminal law was administered by individual judges assisted by the authority of Hindu law in regulating the measure of punishment. In all important cases the sentences were passed subject to the Commissioner's approval. In revenue matters the farming system was abolished and the revenue was collected through government agents. Many poor Brahmans had become greatly dependent on the charitable gifts or dakshina which Bajirav, in the belief that they atoned for sin, had lavishly distributed. To have at once stopped these grants would have caused much suffering. At the same time so much evil was found to attend the grant of money in promiscuous charity that the greater part was devoted to founding a Hindi college at Poona.

Of the management of the country at the time of its transfer to British rule, Mr. Elphinstone (28th September 1819) had no great fault to find either with the criminal justice or the police. [Colebrooke's Elphinstone, II. 53.] The panchayats or civil juries were less satisfactory. They were difficult to summon, and they were slow and in all but simple cases were puzzled. [Colebrooke's Elphinstone, II. 54] The mass of the people were not opposed to the change of rule from the Peshwa to the British. They were strongly inclined for peace and had by no means been favoured under the Brahman government. Still

there were many disaffected Brahmans deshmukhs and other hereditary officers, and discharged soldiery. [Colebrooke's Elphinstone, III. 57.1 The country had greatly improved during the sixteen years of British protection. The people were few compared to the arable area; the lower orders were very comfortable and the upper prosperous. There was abundance of employment in the domestic establishments and foreign conquests of the nation. [In the Satara Proclamation of 9th February 1818, Mr. Elphinstone pointed our that when the English restored Bajirav to power the country was waste the people wretched, and the government penniless. Since 1803, in spite on revenuefarming and exactions, under British protection, the country had recovered and Bajirav had heaped together about eight millions sterling of jewels and treasure Forrest's Elphinstone, 53; Colebrooke's Elphinstone, I. 303. A foreign government must have disadvantages: many of the upper classes must sink into comparative poverty, and many of those who were employed by the court and the army must positively lose their bread. [Colebrooke's Elphinstone, II. 79, 80.] In August 1822 when as Governor of Bombay he came on tour to the Deccan, Mr. Elphinstone found the road so bad in places that his party had to dismount and reached Poona with lame and shoeless horses. The country was not changed. The town was the same, only all of the horses and most of the gentry were gone. [Colebrooke's Elphinstone, II. 141. On his next visit to the Deccan in 1826 Mr. Elphinstone found that by reductions of assessment and still more by stopping exactions the burdens of the people had been much lightened. In spite of bad seasons and redundant produce the condition of the people was probably better than in the best years of the Peshwa's government. The police was worse than under the Marathas though perhaps not so bad as he had expected. Even in the neighbourhood of Poona there had been two or three bands of banditti and there was still one band headed by persons who had been captured and released from want of proof. Except gang robbery and perhaps drunkenness. Mr. Elphinstone did not think crime had increased. In his opinion the most unsuccessful part of the new system was the administration of civil justice. [Colebrooke's Elphinstone, II. 191, 192.]

[Mr. A. Keyser, C.S.] In the same year (1826), partly owing to the scarcity of 1825 partly owing to the reduction in the local garrison, the Ramoshis of south Poona rose into revolt and outlawry. For three year bands of Ramoshis were guilty of atrocious acts of violence. Under the leading of one Umaji they were so enterprising and successful that, in 1827, as they could not be put down, their crimes were pardoned, they were taken into pay, employed as hill police, and enriched with land grants. [Capt. Mackintosh in Trans. Bom. Geog. Soc. I. 260.

Details of Ramoshi risings an given under Justice. The success of the Ramoshis stirred the Kolis of the north-west Poona and Ahmadnagar hills to revolt. Large gangs went into outlawry and did much mischief in Poona, Thana, and Ahmadnagar. Strong detachments of troops were gathered from all the districts round, and, under the skilful management of Captain Mackintosh, by 1830, the rebel gangs were broken, their leaders secured, and order restored. [Trans. Bom. Geog. Soc I. 269-264. Details are given in the Ahmadnagar Statistical Account. The next serious disturbances were risings of hill tribes between 1839 and 1846. Early in 1839 bands of Kolis appeared in various parts of the Sahyadris and attacked and robbed several villages. All castes joined them and their numbers soon rose to three or four hundred, under the leading of three Brahmans Bhau Khare, Chimnaji Jadhay, and Nana Darbare. The rising took a political character; the leaders declared that they were acting for the Peshwa, and assumed charge of the government in his name. As further reductions had lately been made in the Poona garrison the Brahmans persuaded the people that the bulk of the British troops had left the district. The prompt action taken by Lieutenant Rudd the superintendent of police and Mr. Rose the assistant collector prevented much mischief. Hearing that an attack was intended on the mahalkari's treasury at Ghode, Mr. Rose hurried to Ghode, collected a force of messengers and townspeople, and successfully repulsed the repeated attacks of 150 insurgents who besieged them through, the whole night. This was their only serious venture. Shortly after Lieutenant Rudd with a party of the Poona Auxiliary Horse attacked and dispersed the band, taking a number of prisoners. As soon as the main band was broken the members were caught in detail and the rising was at an end. Fifty-four of the rebels were tried, of whom a Brahman Ramchandra Ganesh Gore and a Koli were hanged, twenty-four were pardoned or acquitted, and of the rest some were sentenced to transportation for life and others to various terms of imprisonment. The prompt and vigorous action of Messrs. Rose and Rudd received the thanks of the Court of Directors. In 1844 the hill-tribes again became troublesome, and, as usual, they were joined and helped by disaffected persons of various castes. The leaders of this rising were Raghu Bhangria and Bapu Bhangria the sons of a jamadar of the Ahmadnagar police a Koli by caste whom the Kolis carried off and forced to join them. The Bhangrias' head-quarters were the hilly country in the north-west of Poona. They attacked and robbed several villages generally without doing much harm to the people, but in two instances cutting off headmen's noses. The police made several captures. In one case Captain Giberne the superintendent seized as many as seventy-two outlaws, though Bapu Bhangria the leader

escaped. On the 20th of September 1844 Raghu Bhangria's gang cut off a native officer of police and ten constables who were benighted in the hills and killed all but three. In 1845, the disturbances spread to the Purandhar sub-division south of Poona, and from Purandhar south through Satara. The Poona police were strengthened by sixty-two Ramoshis, and on the 18th of August 1845, in consequence of a quarrel with one of his own men, Bapu Bhangria was caught. In spite of the loss of their leader the gangs, who had the secret support of several influential persons, continued to harass the country and plunder villages. Government money was seized while it was being collected, a patil was murdered because he had helped the police to detect some former outrage, several moneylenders were robbed and one or two were mutilated, and a writer in the Purandhar mamlatdar's establishment was murdered. In Purandhar, with the aid of a Gavli named Kema and a large band of followers, the sons of Umaji the leader in the 1825 rising committed similar depredations. On one occasion at Jejuri they carried off the litter with the holy image but they brought it back. As the police were not strong enough to restore order, in May 1845 a detachment of Native Infantry was guartered at Junnar, other troops were sent to Purandhar, and one hundred men were set to watch the Malsej and Nana passes by which the rebels moved up and down to the Konkan Early in 1846 the Magistrate reported the country quiet, though, in spite of rewards, the ringleaders were still at large. During 1846 Umaji's sons were caught, but they escaped and were not retaken till April 1850 after heading a gang robbery which resulted in the murder of two persons. Except the chief Raghu Bhangria, the other leaders were all secured. A reward of £500 (Rs. 5000) was offered for Raghu Bhangria who was supposed to be gifted with supernatural power, and exercised great influence not only over his own men but over all the north-west Poona hills where, for years, he lived on blackmail levied from Poona and Thana villages. At last on the 2nd of January 1848 Raghu Bhangria was caught by Lieutenant, afterwards General, Gell, and a party of police at Pandharpur where he had gone dressed as a pilgrim. Since 1846 the outlaws had ceased to give much trouble, and, on the 19th of April 1850, the capture of Umaji's sons Tukya and Mankala brought the disturbances to a close.

During the 1857 Mutinies Poona was free from open acts of rebellion, even from offences requiring political prosecutions. In June 1857 a discharged constable was flogged for attempting to raise a disturbance in the city of Poona. Later in the same year the *maulvi* of Poona, Nural Huda, who was one of the leaders of the Wahabi sect of Musalmans in Western India, was detained in the Thana jail under suspicion of

carrying on a treasonable correspondence with the Belgaum and Kolhapur Musalmans who had joined the mutineers. One or two suspicious characters from Northern India were forced to return to their own country, and Chatursing a noted bad character who had given trouble for forty years was made a prisoner on suspicion of intriguing with the rebels. The Kolis and other hill tribes attacked a few villages and robbed their old foes the moneylenders, but even among them there was no outbreak of importance. In 1858 a man was prosecuted and condemned to death for publishing a seditious proclamation in favour of Nana Saheb, the late Peshwa's adopted son. But the conviction was quashed as inquiry seemed to show that the charge was malicious. In September 1857 a seditious paper was posted near the college and library in the city of Poona. The authors were not discovered, and so little importance was attached to this demonstration that no reward was offered for their apprehension. The local authorities were watchful, and the dangerous element in Poona city, which is always considerable, was overawed by the garrison.

In 1873, in the north-west of Poona, Honya, an influential Koli, at the head of a well trained gang, began a series of attacks on the moneylenders who habitually cheat and oppress the hill-tribes and at intervals drive them into crime. Many of the moneylenders were robbed and some had their noses cut off. Honya was caught in 1876 by Major H. Daniell then superintendent of police. In 1875-the spirit of disorder spread from the Kolis to the peace-loving Kunbis of the plain country, and, between May and July, chiefly in Sirur and Bhimthadi, eleven assaults on moneylenders by bands of villagers were committed. Troops were called to the aid of the police and quiet was restored. [Details are given under Capital.] In 1879 the peace of the district was again broken by three gangs of robbers. One of these gangs was of Poona Ramoshis led by Vasudev Balvant Phadke a Poona Brahman, another of Kolis under Krishna Sabla and his son, and a third of Satara Ramoshis under two brothers Hari and Tatya Makaji and one Rama Krishna. Within Poona limits no fewer than fifty-nine gang robberies were committed. These three gangs and a fourth gang in the Nizam's country were put down before the end of 1879.

THE LAND

[Materials for the Land History of Poona include, besides elaborate survey tables prepared in 1881 by Mr. R. B. Pitt of the Revenue Survey, Mr. Elphinstone's Report dated the 25th of October 1819 Edition 1872; Mr. Chaplin's Report dated the 20th of August 1822,

Edition 1877; East India Papers III, and IV. Edition 1826; Mr. Pringle's Lithographed Report dated the 6th of September 1828; Mr. Blair's Lithographed Report 643 dated the 9th of December 1828; Manuscript Selections 157 of 1821-29; Mr. Williamson's Report 2610 dated the 23rd of November 1838; Mr. Vibart's Report 311 dated the 24th of February 1842; Bombay Government Selections New Series LXX. CVII. and CLI.; and survey and yearly jamabandi administration and season reports and other reports and statements in Bombay Government Revenue Record 16 of 1821, 50 of 1822, 68 of 1823, 69 of 1823, 70 of 1823, 71 of 1823, 72 of 1823, 74 of 1823, 95 of 1824, 117 of 1825, 123 of 1825, 174 of 1827, 175 of 1827, 212 of 1828, 351 of 1831, 352 of 1831, 407 of 1832, 426 of 1832, 427 of 1832, 434 of 1832, 484 of 1833, 517 of 1833, 550 of 1834, 595 of 1834, 628 of 1835, 665 of 1835, 666 of 1835, 694 of 1836, 698 of 1836, 766 of 1837, 772 of 1837, 974 of 1839, 1052 of 1839, 1098 of 1840, 1241 of 1841, 1344 of 1842, 1414 of 1842, 1453 of 1843, 1568 of 1844, 17 of 1846, 17 of 1847,15 of 1848, 23 of 1849, 205 of 1849, 16 of 1850, 24 of 1851, 18 of 1852, 172 of 1853, 15 of 1855, 17 of 1858, 17 of 1859, 15 of 1860, 17 of 1861, 90 of 1861, 13 of 1862-64, 235 of 1862-64, 75 of 1866, 57 of 1867, 59 of 1868, 65 of 1869, 95 of 1871, 81 of 1872, 89 of 1873, 97 of 1873; Government Resolution on Revenue Settlement Reports for 1873-74, Revenue Department 6092 dated the 27th of October 1875; Bombay Presidency General Administration Reports from 1872 to 1883; and the printed acquisition statement of the Bombay Presidency].

SECTION I - ACQUISITION AND STAFF.

ACQUITION, 1817-1868.

THE lands of the district of Poona have been gained by conquest, cession, exchange, and lapse. Most of the country fell to the British on the overthrow of the Peshwa in 1817. In 1844, under Government Resolution 1290 dated the 20th of April 1844, on the death of the Chief of Kolaba, the half village of Chakan in Khed lapsed to the British Government. In 1861 His Highness Sindia, by a treaty dated the 12th of December 1860, in exchange for other lands, ceded twelve villages, three in Sirur, seven in Bhimthadi, and two in Haveli. In 1866 His Highness the Gaikwar, under Government Political Eesolution 2974 dated the 9th of October 1866, in exchange for other lands, ceded the half village of Chakan in Khed and one other village in Haveli. In 1868 His Highness Holkar, under Government Revenue Order 4470 dated the 28th of November 1868, in exchange for other lands, ceded six villages, one in Junnar, four in Khed, and one in Sirur.

STAFF, 1884.

District Officers.

The revenue administration of the district is entrusted to an officer styled Collector, on a yearly pay of £2790 (Rs. 27,900). This officer, who is also chief magistrate and the executive head of the district, is helped in his work of general supervision by a staff of four assistants, of whom two are covenanted and two are uncovenanted servants of Government. The sanctioned yearly salaries of the covenanted assistants range from £840 (Rs. 8400) to £1080 (Rs. 10,800); and the salaries of the uncovenanted assistants are £360 (Rs. 3600) and £720 (Rs. 7200). For fiscal and other administrative purposes, the lands under the Collector's charge are distributed among nine sub-divisions, including the city of Poona, which for revenue purposes is a separate sub-division known as the Poona sub-division and placed under the city mamlatdar who is a second class magistrate. Of the nine subdivisions five are entrusted to the covenanted first assistant and the remaning four to the covenanted second assistant collector. Of the uncovenanted assistants one, styled the head-quarter or huzur account officer, and who is a deputy collector, is entrusted with the supervision of the account office and stamp and opium departments. The other, styled city magistrate, who is also a deputy collector, does the criminal and miscellaneous revenue work connected with the city. The treasury is in charge of the Poona Branch of the Bank of Bombay. The covenanted assistant collectors are also assistant magistrates, and have, under the presidency of the Collector, the chief management of the different administrative bodies, local fund and municipal committees, within the limits of their revenue charges.

Sub-Divisional, Officers.

Under the supervision of the Collector and his assistants the revenue charge of each fiscal division is placed in the hands of an officer styled *mamlatdar*. These functionaries who are also entrusted with magisterial powers have yearly salaries varying from £180 to £300 (Rs. 1800 -3000). Three of the fiscal divisions, Haveli Khed and Bhimthadi, contain each a subordinate division *or peta mahal*, placed under the charge of an officer styled *mahalkari*, who, except that he has no treasury to superintend, exercises the revenue and magisterial powers generally entrusted to a mamlatdar. The yearly pay of the mahalkari is £72 (Rs. 720).

Village officers.

In revenue and police matters the charge of the 997 34 Government villages is entrusted to 1128 headmen of whom six are stipendiary and 1122 are hereditary. Most of them are Kunbis, but some are Musalmans and others belong to the Brahman, Shenvi, Guray, Nhavi, Dhobi, Dhangar, and Koli castes. One of the stipendiary and 116 of the hereditary headmen perform revenue duties only, one of the stipendiary and 117 of the hereditary attend to matters of police only, and four stipendiary and 889 hereditary headmen are entrusted with both revenue and police charges. The yearly pay of the headmen depends on the village revenue. It varies from 4s. (Rs. 2) to £23 14s. (Rs. 237) and averages £3 (Rs. 30). In many villages, besides the headman, members of his family are in receipt of state land-grants representing a yearly sum of £290 (Rs. 2900). Of £5223 (Rs. 52,230) the total yearly charge on account of the headmen of villages and their families, £435 (Rs. 4350) are met by grants of land and £4788 (Rs. 47,880) are paid in cash. Several of the larger villages have an assistant headman or chaughula. He is generally a Maratha Kunbi by caste and is paid 10s, to £5 (Rs.5-50)a year. To keep the village accounts, prepare statistics, and help the village headmen there is a body of seventeen stipendiary and 816 hereditary or in all of 833 village accountants. Most of them are Brahmans and others belong to the Prabhu, Sonar, Guray, and Golak castes. Every village accountant has an average charge of about one village, containing about 900 inhabitants, and yielding an average yearly revenue of £160 (Rs. 1600). Their yearly salaries vary from 6s. to £29 14s. (Rs. 3-Rs. 297) and average £7 12s. (Rs. 76). The total yearly charge amounts to £6570 (Rs. 65,700) of which £30 (Rs. 300) are met by land-grants and £6540 (Rs. 65,400) are paid in cash.

Village Servants.

Under the headmen and accountants are 6495 village servants, who are lible both for revenue and police duties. They are Kolis, Mhars, or Ramoshis. The yearly cost of this establishment amounts to £3027 (Rs. 30,270) being about 8s. (Rs. 4) to each man or a cost to each village of about £3 (Rs. 30). Of the whole amount, £2602 (Rs. 26,020) are met by grants of land and £425 (Rs. 4250) are paid in cash. The average yearly cost of village establishments may be thus summarised:

Poona Village Establishments, 1884.

| | £ | Rs. |
|--|---|-----|
|--|---|-----|

| Headmen | 6223 | 52,230 |
|-------------|--------|----------|
| Accountants | 6570 | 65,700 |
| Servants | 3027 | 30,270 |
| Total | 14,820 | 1,48,200 |

This is equal to a charge of £14 16s. (Rs. 148) a village or about thirteen per cent of the district land revenue.

ALIENATED VILLAGES, 1884

Of the 1201 villages of the district 997% are Government and 203% are private or alienated. Alienated villages [Collector of Poona, 3070 of 25th April 1884. are of three classes, sharakati or share villages whose revenues are divided between Government and private holders, saranjami or military service grant villages, and inam or grant villages. By caste the holders of these villages are Brahmans, Marathas, Prabhus, Malis, Vanis, Gosavis, and Musalmans. A few proprietors of alienated villages live in their villages and themselves manage them. Few alienated villages are in the hands of one proprietor; but it is the rental of the village not its lands which are divided among the sharers. The estates or estate-shares are often mortgaged but rarely sold to creditors. The condition of the people and the character of the tillage in alienated and neighbouring Government villages show no marked difference. Most holders of land in alienated villages pay a fixed rent, but some are yearly tenants. Tenants generally pay their rent in cash; but, in villages where the survey rates are not fixed, in a few cases they pay their rent in grain. The acre rates generally vary from 3d. to 3s. (Rs.½-1½). In villages where the survey rates have not been introduced the rents are not fixed under any uniform system. In some villages the rent is so much the bigha, in others it is so much the khandi, and a lump payment is sometimes charged on a certain plot of land. In villages under the survey settlement the rates are the same as in Government villages; and in villages into which the survey has not been introduced, the alienees levy a rent equal to about 3d. to 3s. (Rs. $\frac{1}{2}$) the acre. The alienees make no special arrangements to meet the case of a tenant improving his field by digging a well in it, or by turning it from dry crop to rice land. The alienees set aside land free of assessment as village grazing land. In surveyed alienated villages the occupants have the same rights as regards trees as in Government villages. If an alienee applies to the Collector for help to recover his dues, assistance is given in accordance with the provisions of the Land Revenue Code.

SECTION II - HISTORY

Early Hindu Thal or Jatha System.

The earliest revenue system of which traces remained at the beginning of British rule was the *jatha* that is the family estate or the *thal* that is the settlement system. In 1821 from every original paper he could find relating to settlers or thalkaris and their occupation of land, the Collector Captain Robertson found that, at a former time, the whole arable land of each village was apportioned among a certain number of families. [Captain Robertson, Collector, 10th October 1821, East India Papers IV. 530-531. In 1821 in some villages the *jathas* or family estates were (Extract Revenue Letter from Bombay 5th November 1823, East India Papers III. 805) large plots of land with a fixed rental, called *mund*, and in other villages the large holding was divided into fields each with a fixed rate, called thika or tika; these words seem to be of Dravidian origin and perhaps belong to the time of the Devgiri Yadavs (1150-1310) who had a strong southern element. The division and possession of land and the boundaries of villages were well defined before A.D. 1600 the time of Malik Ambar the minister of Ahmadnagar, and Captain Robertson was of opinion that private property in land existed from a very much earlier period. In an old account of the village of Ving of the Nirthadi district it is stated that ' during the management of Nabi Yar of the Kulbarga Sultanat there was neither a division of the fields nor of the bounds of the village, the plains being covered with grass, and the occupation of the people the feeding of horned cattle or *gure* for which a fixed sum was exacted. During the management of the Baridis in Bedar (1498-1526) and in the administration of the black and white Khojas (probably Khajas) the village bounds were fixed; portions of land were given to particular persons whose names were registered and a rent or dast was established.' The preamble to a paper exhibiting a renewed distribution of lands in the village of Gord in A.D. 1593 after that village had been depopulated and probably reduced like the village of Ving (though at a much later period) to be a pasture land for cattle, proves also something regarding the division of land at a remote period. 'Karim' Beg Saheb Nawab sent Janu Saheb to settle the country. On reaching the village of Sal in A.D. 1593, where he halted for a month, Janu Saheb attached the patilship of the whole country until the patils put a stop to exciters of sedition and to plunderers going about the country. He then made an agreement with them, which set forth that as government had come to know that the country had been completely ruined from the disturbances and rebellions of late years, it was desirous of repeopling it and bringing it again into a flourishing

condition, and therefore that it granted *kauls* to the *patils* to assemble the villagers who had fled. The patils having been promised their kabti (?) rights, agreed to the terms and went to their different villages. Among the rest the patil of the village of Gord which was waste, assembled the inhabitants and went to the sarkar, where they requested that thoir lands might be measured out and assessed according to the measurement. In consequence of this, government ordered that the settlement made in Kutub-ud-din's time should be renewed. The people, satisfied with this order, returned home, and having met in the dargha of Syed Ambar Chasti, they determined that the old mirasdars should resume their old estates, and that those lands whose former proprietors were not present should be bestowed on new proprietors. As all agreed to the justice of this, the lands were occupied as follows: Bunyadi Thalkari or original landlord and Inamdars Jejji, Patil, Kale Mukadam to possess (1) his own field called Parinda containing twelve khandis of which ten and a half khandis are arable, and (2) three and a half khandis of the field called Chinchkele which contains seven khandis extending from the road to the river and of which the former mirasdar is not present.' Captain H. D. Robertson, Collector, 1st May 1820, East India Tapers IV. 415-416. The number of families seems to have seldom been fewer than four or more than twenty-five except in large villages with dependent hamlets or vadis which in some cases seemed to have thirty to forty original families. The lands each family occupied were distinguished by the occupant's surname. Thus in a village the settlement or holding, thal, of a family of the Jadhav tribe was called Jadhav Thal; the holding of a Sindia family Sindia Thai; and of a Pavar family Pavar Thal; and though none of their descendants remained, the estates still (October 1821) kept the name of the original settler. These holdings were called *jathas* or family estates. Whether each estate at first belonged to a single person is not known. It semed to Captain Robertson, that, at the time of the original settlement, one man with his children took a fourth or a fifth or a sixth share of the village lands. His reason for this opinion was that in the family estates which remained perfect in 1821 the original estate was held in small portions by persons of the same family and surname who had acquired their separate shares by the Hindu law of succession. These descendants were collectively termed a jatha or family. Among them they were supposed to possess the whole of the original estate; and as a body they were responsible for the payment of whatever was due to government and others for the whole estate. If the owner of one of the shares let his land fall waste, the whole family was responsible for his share of the rental; and the land of his share was placed at their disposal. In the same way, if a member of the family died without an heir, his portion of the family

estate was divided among the surviving relations according to the Hindu law of inheritance. The individual members and sharers of the land of a jatha or family estate appeared always to have been at liberty to do what they pleased with their own portions. They might let them out for a year or for several years or they might allow them to lie fallow. But whatever they did with their land they were responsible to the other members for their share of the government demand. It was therefore an object with the whole of the members of a family estate or *jatha* to see that no individual by extravagance or carelessness ruined himself and burthened the rest with the payment of his share of the rental. Any member of the family estate was also free to dispose of his share of the patrimony or 'baproti' literally father's bread. If a sharer of a joint estate wished to sell his share, it was never allowed to go to a stranger if any of the family was able to buy it. If no member of the family was able to buy it, and if the holder of the share was forced to sell, the share was made over to any one, a Brahman or a Kunbi of another family, or a Musalman, whoever might offer to buy it. The admission of outsiders as members of the joint estate by purchase gave rise to a distinction between the shareholders. The sharers who belonged to the original family were known as ghar bhaus or house brothers and the sharers who entered by purchase were known as biradar bhaus literally brethren, brothers apparently in the sense of legal brothers. [East India Papers, IV. 531. Biradar, a brother, a Persian word used only in grants deeds and public papers. The new brother became liable to all the particular customs and rules which bound the body of sharers he had joined. In 1821, though there remained no trace of the practice, several old settlers or thalkaris agreed in stating that very long ago the representatives of the eldest branch of the family estate or *jatha* looked after the cultivation and gathered the dues from the younger branches. The head of the family stood between the younger branches and the headman or *mukadam* of the village. When from any cause the family estate failed to pay the government rental, the village headman never looked to the individual members but to the head of the family to make good what was wanting. Though this practice had ceased long before the beginning of British rule, a trace of it remained in the custom of having one family estate chosen, either by government or by other family estates, to undertake, through its head, the duty of collecting their shares of the government demand from the different estates. To this duty was joined the responsibility of making good any failure in the amount of the government demand. The members of the family-estate who were thus chosen to represent the village were all styled patils, and the head of the patil estate was called the mukadam or chief of the patils and therefore the chief of all the other joint estates of the village.

[Captain Robertson thought that, from the meaning of the word patil, winch he apparently derived from pattakil that is the holder of a grant or lease, the use of patil as a member of the responsible estate was not the original use of the word. In his opinion the word patil was originally applied to a person by whom the whole of a new village was settled. He noticed that the use of the Persian term mukadam showed that the practice of choosing one man to be responsible for the whole village revenue did not date from before the Musalman conquest of the Deccan. Captain Robertson, Collector, 10th October 1821, East India Papers IV. 531-534] In some villages for the same reason that it was found convenient to have one responsible family-estate it was found desirable to have a second joint-estate to help the first. In this way arose the chaughulas or families of assistant patils. In 1821 the members of the family-estate which was responsible for the village rental or the jatha of patils were respected more than the members of the other family-estates. The position of head or *mukadam* of the village was attended with several advantages. Besides his own share of his family-estate the headman held grant or *inam* lands free from tax. He also had the control of the village expenses and several other substantial perquisites. In the same way as all the members of a family-estate or *jatha* were obliged to make good the share of any defaulting member, so the body of family-estates wore bound to make good the share of any defaulting estate.

In Captain Robertson's opinion the village head or *mukadam* had formerly been and still was as much a natural head of the village society as a servant of government. It was a matter of no small importance to the members of the joint estates to have a representative who could meet and settle the claims of the officers of government. The headman had been and was still a magistrate by the will of the community as well as by the appointment of government He enforced the observances of what in England would be termed the bye-laws of the corporation; he formerly raised by contribution a sum of money to meet the expenses of they corporation and to support his own dignity as its head; [Until the kamal or highest that is the Maratha settlement, which was made between 1758 and 1760, the headman was allowed to spend what amount he chose on village expenses. In 1760 government undertook to regulate village expenses and the sums spent were entered in the yearly rent statement or jamabandi. East India Papers, IV. 532-533. he suggested improvements for the benefit of the association and marshalled its members to aid him in maintaining the public peace; he dispensed civil justice as a patriarch to those who chose to submit to his decision as referee, or he presided over the proceedings of others whom either he or the parties

concerned named as arbitrators. Captain Robertson was of opinion that in virtue of his position as president of the corporation, the *mukadam* was originally granted the management of its affairs, and the regulation of the village feasts and temples, and that, like other presidents, he had turned this power to his own advantage, and by degrees, increased the amount of the village charges.

In a country like the Deccan, which for centuries had been subject to perpetual revolutions and disturbances, many villages must have found the benefit of forming a society, all of whose members were bound to support each other. The strength of the feeling of fellowship or association was shown by the walls which guarded the villages and by the bravery with which in disturbed times these walls had often been defended against large bodies of troops.

Though in theory the leading family estate and its head were responsible for the whole rental of the village and were bound to make good the failures of minor family estates, this responsibility could be enforced only in ordinary years. When any great and general calamity happened, and the ruin of villages from war or from pestilence was not uncommon and in nine cases out of ten was the result either of the weakness or of the greed of the government, the government was forced to take less than the full rental, sometimes to recover only from the ground which was actually under tillage. Still in times of disorder and misrule the remissions were often insufficient to prevent the impoverishment if not the ruin of the responsible head. Headmen were forced to part either with the whole or with some of their rights and privileges. When a headman was forced to sell his rights and privileges two or three sharers by purchase were occasionally established, and each took a certain number of family estates, or if the original family estates had been broken, they took a certain number of individuals for whose share of the rental they became responsible and from whom they received man-pan or tokens of respect. These divisions of the headship were known as thalkaris' sarfas or sarifas that is settlers' dues. A sharer or takshimdar of the headship had also assigned to him a share of the waste or *gatkul* land in proportion to his share of the headship. This plan of ranging a certain number of family estates or of individuals under each sharer in the headship was, no doubt, a good arrangement for the individual landholder as it saved him from the risk of having to pay headship dues to more than one person. The respect or man-pan enjoyed by the head or mukadam was never shared by his relations unless when the office had been lately acquired by purchase. When a headship was bought the signs of respect or man-pan were generally distributed among all the members of the purchasing family.

[Capt. Robertson, Collector, 10th Oct. 1821, East India Papers IV. 531-534.]

Malik Ambar.

Another revenue system of which traces remained at the beginning of British rule was the system of Malik Ambar, the famous Abyssinian minister of the last Nizam Shahi king Murtaza II. at the beginning of the seventeenth century. Malik Ambar seems to have adopted many of the principles of Todar Mal's settlement which was introduced into parts of Upper India and of Gujarat daring the reign of the Emperor Akbar (1556-1605), and into Khandesh and parts of the Deccan during the reign of Shah Jahan (1627-1658). According to Captain Robertson, the object of Todar Mal's settlement was to measure the land under tillage into bighas and to divide the lands into four classes according to their quality, to ascertain from year to year what crops had been grown, to strike a medium of the value of the crops grown, and to take one-fourth of the estimated value of the crops in cash. This was called the cash rent settlement or jamabandi nagdi and the holdings which were held under this settlement were known as rakbas or areas. [East India Papers, IV. 409.1

Like Todar Mal's settlement Malik Ambar's system was based on a correct knowledge of the area [It is doubtful if Malik Ambar's bighas were of uniform size.] of the land tilled and of the money value of the crop, and the determination to limit the state demand to a small share of the actual money value of the crop. Malik Ambar's settlement was introduced between 1605 and 1626. In 1820 he was still remembered as the benefactor of the people. According to a Maratha legend which narrated events that occurred about-1618, Malik Ambar was said to have doubled the revenues of the government at the same time that he improved the state of the people. According to another tradition it was Malik Ambar who established the village servants or balutas. [Captain Robertson, 1st May 1820, East India Papers IV. 408-409.] One chief point of difference between the systems of Todar Mal and of Malik Ambar was that Malik Ambar converted his grain demand into fixed cash rates- These conversion rates did not vary with the fluctuations in the price of grain and from their extreme lowness were probably at the time when they were introduced greatly below the actual prices. Todar Mal's conversion rates from grain into cash seem to have been based on the produce prices which were ruling when his survey was introduced. His system provided for a revision of the conversion rates so that they might continue in agreement with the actual market prices of grain. [East India Papers, IV. 410. According to

Grant Puff (Maratha History, 43) Malik Ambar abolished revenue farming, and committed the management of the land revenue to Brahman agents under Muhammadan superintendence. He restored such parts of the village establishment as had fallen into decay and he revived a mode of assessing the fields by collecting a moderate proportion of the actual produce in kind, which, after the experience of several seasons, was (1614) commuted for a payment in Money fettled annually according to the cultivation. His assessment was said to be two-fifths and his money commutation one-third of the produce.] Malik Ambar's experiments to fix the average outturn of the different plots of village land were confined to the arable lands of the village. Hill lands were not included. Before Malik Ambar's time the boundaries of the villages were known. What he did was to introduce into the arable land, for waste and hill lands seem not to have been included, the practice of division into equal areas or bighas and of varying the demand on these areas according to the quality of the soil. Under Malik Ambar's plan when the whole arable land of the village had been ascertained, it was divided according to ancient practice into two classes bagayat or garden land and jirayat or corn-land. The arable area was also, divided into khalsa or land which yielded a revenue to government and *inamat* or land whose government rental had been alienated "through favour or in return for service. After deducting the land whose government rental had been alienated from the total area, the khalsa land, that is the land which paid a rent to government, was entered as including so much garden or bagavat and so much cornland or *jirayat*. In the accounts two classes of rent-alienated land were distinguished, dumala or two-ownered inam which was held by vatandars and wholly inam which was held by mosques and temples and by village servants. After the entries regarding the rent-alienated lands, were the details of the assessment of the rent-paying or khalsa lands and lastly there was an entry of the cesses, some of them fixed others varying, which were levied on the craftsmen, shopkeepers and village servants or balutas. [East India Papers, IV. 415.] Captain Robertson found no evidence to show what portion of the produce Malik Ambar took as the government share. He thought it fair to conclude that Malik Ambar fixed the share at less than one-third, which had been the usual exaction before his time. In Captain Robertson's opinion he probably adopted Todar Mal's plan and fixed the rent at one-fourth of the produce. [Captain Robertson, 1st May 1820, East India Papers IV. 418; Capt. Robertson's Report of 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 479. Compare Granat Duff (Maratha History, 43) who states that Malik Ambar'a share when reduced to cash equalled one-third, and Elphinstone's History of India, 553. Grant Duff's estimate has been accepted by later writers.

See Bom. Gov. Sel. CVII. 9. According to the tankha assessment which was introduced by Todar Mal the celebrated minister of Akbar, and which derived its name from the small silver coin in which the revues were collected, the lands were in the first instance assessed with reference to thefertility in a proportion varying from one-half to oneseventh of the gross produce according to the expense of culture and to the description of crop grown. The government share was then commuted for a money payment and in time when a measurement classification and register had taken place, the regulated assessment was fixed at a fourth of the whole produce of each field throughout the year and thus became the permanent assessment of the land. This is Captain Grant's description of the principles on which the tankha assessment was fixed. Mr. Mills, Principal Collector, 23rd December 1835, Bom. Gov. Rev. Rec. 698 of 1836, 521 Malik Ambar encouraged the higher kinds of cultivation by levying no special garden rates. [Captain Robertson, 1st February 1825, Bom. Gov. Rev. Rec 117 of 1825,488]

As regards the character of Malik Ambar's survey well informed natives were of opinion that the areas were fixed not by measuring but by a glance estimate or *nazar pahani*. This view seemed to be supported by the fact that he continued to use the old terms for measuring. He seemed to have divided the land into good and bad without attempting so elaborate a classification as was intended in Todar Mal's scheme. Malik Ambar though he may have called the divisions of land or holdings bighas, seems to have used the word bigha in its original sense of share and not in its later sense of an area containing a definite number of square yards. He seems to have fixed the amount which a holding could bear by a test of the produce it yielded. In some cases a man might hold double as large a bigha as another, but the land was probably only half as rich and so the pressure of the demand was the same. It was the crop-yielding powers of the different estates which were fixed, not their areas. [Captain Robertson, 1st May 1820, East India Papers IV. 418; Captain Robertson, 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 482. Captain Robertson thinks it not certain whether Malik Ambar measured the square contents of the land. Bom. Gov. Rev. Rec. 117 of 1825, 480.] At the same time the fact that when tested by measurements the quantity of grain taken on an estimate bigha varied from about 54 to 90 pounds (9/16 to 15/16 of a man) showed that Malik Ambar had taken pains to ascertain the capabilities of the village lands. According to a tradition, which Captain Robertson believed was correct, the plan he followed in ascertaining the productive powers of a field was by a test or *nimtana* of the produce it yielded. [Captain Robertson (East India Papers, IV. 420)

notices that the test or nimtana system was still common in North India and in parts of Khandesh and Gujarat. It was the basis of the batai or crop-share system. The test system was the system adopted by Shivaji's father Shahaji's headman Dadaji Kondadev when he introduced a settlement into the Mavals or western hill tracts of Poona in 1645.] At harvest time the sheaves were counted in a field of an estimated number of bighas. Three sheaves, a good, a middling, and a bad, were picked out and the quantity of grain each contained was ascertained and the average of the three yields was struck and this average multiplied into the whole number of sheaves gave the grain-yield of the field. [East India Papers, IV. 420.] These experiments were repeated through a series of years some say as many as ten years to ascertain the effect of the season on the yield of the land. In this way the yield in an average season was ascertained.

The amount realized by the trade and other cesses varied from year to year, and the share of the village revenue which continued to be taken in grain fluctuated with the price of grain, but under Malik Ambar's system the bulk of the demand on each village became constant. [East India Papers, IV. 418. Malik Ambar's settlement contains no reference to waste land. According to Captain Robertson he based his estimate on the whole arable land of the village without reference to the state of cultivation. After fixing what rental it should pay to government he handed the management of the village to the patils with orders that they should realize the amount. [Captain Robertson, 1st May 1820, East India Papers IV. 418. It has already been noticed that Malik Ambar's survey did not include unarable waste lands. If his settlement was the boon which it was believed to be, it seems difficult to understand how he could have called on the village to pay for more land than was actually under tillage or at least was held for cultivation.] It appears that under Malik Ambar's system the whole of the detailed arrangement with the actual landholders was left to the village head. Under this system the headman was either a contractor who was bound to raise a certain sum from the village or he was the representative of the whole body of landholders or mirasdars. As the headman or the representative was bound to pay the whole village rental, so each holder was bound to pay the whole of the share of the rental to which his land was liable whether his land was under tillage or was waste. [East India Papers, IV. 418-419.]

After Malik Ambar's examination or glance survey of the arable land of a village the quantity of grain which it should be called upon to pay was fixed. [Captain Robertson (1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825,479) says the whole arable and assessed lands.']

After the quantity of grain which the whole village should yield was fixed, the rents of alienated lands were deducted and either the whole of the grain or some part less than the whole was turned into a cash payment. There seemed to be no instance of a fixed money settlement which had not before been a fixed grain settlement. As Malik Ambar made his commutation rates permanent he was forced to fix them very low. In Malik Ambar's estimates the price or money value of grain was not more than one-seventh of the average price of the same amount of grain between 1820 and 1825. This Captain Robertson was assured by the hereditary revenue officers was not due to any change in the size of the grain measures. [Captain Robertson, 1st May 1820, East India Papers IV. 419-420; 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 481.] Calculations made by Captain Robertson seemed to show that on the shenshahi bigha of 3926\% square yards or about 4/5ths of an acre, which was the land measure in use in the Deccan since the time of the Moghals, Malik Ambar's demand amounted in grain to about 82 pounds (13/16ths of a man of twelve paylis or about 101 pounds) and in money according to Malik Ambar's grain prices to $7\frac{1}{2}d$. (5 as.) and according to the prices of grain in 1820 varied from 3s. 6d. to 4s. (Rs. 1¾-2). [Captain Robertson, 1st May 1820, East India Papers IV. 420. Captain Robertson's calculation of the average amount of grain taken under Malik Ambar's system was based on a knowledge of the area of arable land ascertained by actual measurement between A.D. 1662 and 1666 and of the quantity of grain taken as a fixed rent by Malik Ambar and his successors.. The quantity of grain was fixed on a shenshahi bigha. The measurements introduced by the Moghals showed that in an uniform area of 3926% square yards, that is on a *shenshahi bigha*, the rates introduced by Malik Ambar, based chiefly on the ascertained outturn, varied from 9/16ths to 14/16ths and 15/16ths of a man. The average was 13/16ths. This average was ascertained by summing the arable land in forty villages and comparing it with the whole fixed quantity of grain payable by these villages under Malik Ambar's permanent settlement. According a Captain Robertson's calculations, on the average price of grain between 1820 and 1825 which was 42 pounds for 2s. (5 paylis the rupee), 9/15ths of a man represents a shenshahi bigha rate of Re. 1 at. 5½ 10/16ths of Rs. 1½; 11/16ths of Re. 1 as. 10½; 12/16ths of Re. 1 as.12¾; 13/16ths of Re. 1 as. 15; 14/16ths of Rs. 2 as. 1½; and 15/16ths of Rs. 21/4. capt. Robertson, 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 480-481. According to Captain Robertson the low rates fixed by Malik Ambar greatly enriched the country. The headmen were able to let out waste lands at rates which secured cultivators; the interests of landholders were fostered, and cultivators

appeared in villages which had before been empty. [Capt Robertson, 1st February 1825, Bom, Gov, Rev, Rec. 117 of 1825, 481-482]

The Marathas.

About 1637 when Mahomed Shah (1626-1656) of Bijapur made an alliance with Shah Jahan, the Bijapur king gave to Shahaji, Shivaji's father, the greater part of the present district of Poona including the divisions of Chakan, Poona, Supa, Baramati, Indapur, and the twelve mountain valleys called Mavals. Shahaji entrusted the management of his land to Dadaji Kondadev a Brahman who is said to have been extremely just and prudent, but very severe. Dadaji Kondadev took advantage of the distress in 1630 to tempt large numbers of cultivators to settle in the lands under his charge, [East India Papers, IV. 413.] and took such pains to improve the country that, if we may credit his historian, there were not twenty cubits of arable waste in the whole of his charge. This statement seems to be mainly poetical as another Maratha account describes the Mavals or the greater part of the hilly west of Poona as miserable and empty of people, overrun with woods and with wolves. Dadaji destroyed the wolves and cleared much of the forests and introduced or confirmed Malik Ambar's settlement, fixing the amount of the government demand by a test or nimtana of the actual outturn of the crop. In connection with Dadaji Kondadev's revenue management it is worthy of note that when Shahaji overran the eastern Karnatak he drew numbers of Maratha Brahmans from Poona and appointing them deshmukhs, deshpandes, and kulkarnis, introduced Dadaji's revenue system into his conquests. [East India Papers, IV.412 Lt. Col. Mark Wilks' South of India, 1810, I. 72-74. The same practice was introduced by Shivaji about 1652 into his Konkan and other conquests. [East India Papers, IV. 412-414. Jervis' Konkan, 90,92.]

The Moghals.

In 1664 when the Moghals under prince Muazzam drove Shivaji out of his father's lands, they found the country much reduced by the ravages of war and pestilence. Between 1662 and 1666 they made a correct measurement and division into uniform *bighas* of 3926% square yards of a large area of land near Poona. [East India Papers, IV. 420; Bom. Gov. Rev. Rec. 117 of 1825, 480-481, 486-487.] But in the depressed state of the country they were not able to continue Malik Ambar's system. In 1664 in its stead prince Muazzam introduced a crop division or *batai* system under which the outturn was divided equally between the government and the landholder or *rayat*, who,

besides paying half of his crop, had to meet the cost of the district superintendent or *deshmukh* and the accountant or *deshpande* and also of the village headman and village accountant. [Bom. Gov. Rev. Rec. 117 of 1825, 486-487.] Special garden rates of £1 7s. 7¼d. the acre (Rs. 11¼ the *bigha*) in channel watered or *patasthal* and of 18s. 4¾d. the acre (Rs. 7½ the *bigha*) in well watered or *motasthal* lands, were for the first time introduced. [Capt. Robertson, 1st Feb. 1825, Bom. Gov. Rev. Rec. 117 of 1825, 488.]

The Marathas.

In 1669 when Shivaji reconquered Poona he introduced a cash rental instead of a payment in kind. The rates seem to have been based on the custom or *rivaj*, which was apparently in use before Malik Ambar's time, of government taking one-third and leaving two-thirds to the landholders. This one-third demand represented an acre rate of about 260 pounds (2 mans 2½ paylis the shenshahi bigha) in first rate land; 177 pounds (1½ mans the bigha) in second rate land; and 118 pounds (1 man the bigha) in third rate land. On the grain prices ruling about 1825 these amounts represented a cash acre rate of 13s. (Rs. 5 as. 4¾ the bigha) in first rate land; of 8s. 10d.(Rs. 3 as. 9½ the bigha) in second rate land; and of 5s. 11d. (Rs. 2 as. 61/2 the bigha) in third rate land. Shivaji continued prince Muazzam'a garden rate of £1 7s. 7¼d. the acre (Rs. 114the bigha) in channel and of 18s. 44d. the acre (Rs. 7½ the bigha) in well-watered land. No change was made in the relations between, the government and the landholder. The settlement was, as it had been under Malik Ambar's settlement, by village or mauzevar. The village had to make good a lump sum. The villagers were left to arrange among themselves for the payment of shares which had fallen waste Land deserted by its owner became the joint property of the village. The remaining villagers tilled it either dividing it among themselves or clubbing together to cultivate it as common land. If this system had been continued Captain Robertson thought that individual property in land would have disappeared. Under this system Shivaji's rental was uncertain and the people suffered, and in 1674 Malik Ambar's system of a fixed money rent for the whole village was restored. [Capt. Robertson, 1st Feb. 1825, Bom. Gov. Rev. Rec, 117 of 1825, 487-489.]

The troubles during the wars between Shivaji and the Moghals and between Aurangzeb and Bijapur which ended in the overthrow of Bijapur in 1686, and the still greater disorders which filled the first twenty years of the eighteenth century must have caused a decline in the area under tillage and in the production. There was also according

to Captain Robertson (1st February 1825) [Bom. Gov. Rev. Rec. 117 of 1826, 489-491. Also 1st May 1820. East India Papers IV. 426-427.] an increased abundance of money; partly because money had been cheapened By the continuous working of the American mines, and partly because in the spread of Maratha power the spoils of a great part of India were brought home by the Poona soldiery. The effect of the rise in the price of produce was greatly to reduce the government share in the outturn of the land. To make this loss good, or probably rather to adapt the system to the disordered state of the country, fresh cesses were levied at any time and under any form which seemed to be likely to yield revenue. This continued till 1758 when under the rule of Peshwa Balaji Bajirav (1740-1761) a new and very elaborate measurement and settlement was introduced. The new settlement was introduced into great part of Junnar between 1758 and 1768 and at a later date into the neighbourhood of Poona. The rates under this new system were termed the *hamal*. The amount of money levied under the *kamal* was about twice as great as it had been under Malik Ambar's tankha settlement. The land was measured and entered in shenshahi bigh'as and the bigha rates were fixed according to the quality of the soil. The kamal or Peshwa system also differed from the tankha or Musalman system in levying the village rental on the area actually under tillage and not on the whole arable area of the village. Under the new system the whole rental or kamal akar of a village was composed of the original rental or ain jama and of extra or shivayajama. Thus in the village of A vsari Khurd the kamal settlement gave the following details. The measurements showed an area of 2530 acres or 3120 shenshahi bighas in actual cultivation, assessed at £393 (Rs. 3930). Of the whole area 19 acres (23¾ bighas) were garden land or bagayat assessed at 14s. 91/2d. an acre (Rs. 6 a bigha); 192 acres (236¾ bighas) were green products and fruit tree land called mala and assessed at 7s. 434d. an acre (Rs. 3 a bigha); 336 acres (41414 bighas) of black or first class grain land called kali and assessed at 4s. 11d. an acre (Rs. 2 a bigha); 435 acres (536¾ bighas) of second class grain land assessed at 3s. %d. an acre (Rs. 1¼ a bigha); 478 acres (589¼ bighas) of third class grain land assessed at 2s. 5½d. an acre (Re. 1 a bigha), and 1070 acres (1319¼ bighas) of fourth class grain land assessed at 1s. 10%d. an acre (Rs. ¾ a bigha). To this original rental or ain jama was added under shivaya jama or extras £4 16s. (Rs. 48) under Mhars' land or Mhar hadola, £15 8s. (Rs. 154) as trade tax or mohtarfa, and £6 12s. (Rs. 66) from village servants entered as baluta. [East India Papers, IV. 427. It seems doubtful how far the elaborate system described in the text was introduced. In the Purandhar sub-division a very much rougher system seems to have been in force. The arable lands were parcelled into chahurs, each

chahur representing about 120 bighas. These which contained lands varying much in quality were assessed in poor villages at Rs. 36 to Rs. 60, in middle villages at Rs. 60 to Rs. 90, and in good villages at Rs. 90 to Rs. 120 or Rs. 130. Lt. Shortrede 1st Oct. 1835 Bom. Gov. Rev. Rec. 698 of 1836, 85; Mr. Mills, 23rd Dec. 1835, Do. 58. Capt. Robertson, 1st May 1820, East India Papers, IV. 427. Other items of extra assessment or shivaya jama are mentioned by Mr. Elphinstone: On the cultivators dahak patti or a tax of one year's revenue in ten; on the lands of the *deshmukh* and *deshpande chavthai* or a fourth of the fees levied every year; on the Mhars a mhar mharki; on mirasdars a miras patti once in three years; on inamdars an inam tijai or one-third of the government share of their lands and an inam patti or occasional tax imposed in times of need; pandhar gana an additional 12 per cent on the tankha, levied once it twelve years; and vihir hunda or an extra tax on lands watered from wells. Other taxes were on traders alone. These were mohtarfa or a tax on shopkeepers varying with their means, in fact an income tax; baluti or a tax on the twelve village servants; these too were sometimes included in the ain jama and in some places the *mohtarfa* formed a distinct head by itself; bazar baithak or a tax on stalls at fairs; kambhar khan or a tax on earth dug up by the potters. The following fell indiscriminately on both classes; ghar patti or ambar sari or house tax levied from all but Brahmans and village officers; bachak pahani or a fee on the annual examination of weights and measures; tug or a similar fee on examining the scales used for bulky articles; danka, or danka, or a tar on the right to beat a drum on particular religious and other occasions; kharidi jinnas or purveyance or a tax on the right to purchase articles at a certain rate; this was generally commuted for a money payment; lagan takka or a tax on marriages; pat dam or a particular tax on the marriage of Widows; mkais patti or a tax on buffaloes; bakri patti or a tax on sheep. There were also-occasional contributions in kind called fad farmash such as bullocks' hides, charcoal, hemp, rope, and butter, which were often commuted for fixed money payments; many other sums were paid in commutation for service. All these collections were made by the patil in small villages though in towns there was a separate officer to levy those not connected with the land. Government had other sources of revenue included in the *shivaya* jama or extra collections in each village besides those enumerated. The principal were kamavis gunhegari or khand farshi as fines and forfeitures, baitanmal escheats and profit from deposits and temporary sequestrations; vancharai grazing fees; ghaskatai grass fees; devashan dabi derived from offerings to idols; kharbuj vadi or a tax on melon gardens in the beds of livers. Besides all this and besides the village expenses or goon kharch there were taxes to defray the mahal

sadilvar or district expenses not already provided for by government, in which were included many personal expenses of the mamlatdars and a large fund for embezzlement and corruption for the mamlatdar and the courtiers Who befriended him. In addition to all these exactions there were occasional impositions en extraordinary emergencies which were called *jasti patti* or extra cess and *eksali patti* or year cess. If these happened to be continued for several years they ceased to be considered as occasional impositions and fell into the regular *shivaya jama*; but until the introduction of the farming system they were said to have been as rare as the occasions which furnished the pretext for them. Mr. Elphinstone, 25th October 1819 (Ed. 1872,26-27).]

After 1720, in parts of Poona not included in the svaraj, The Poona districts included in the grant of the *svaraj* were Poona, Supa including Baramati, Indapur, and Junnar, Grant Duff's Marathas, 200.1 the full rental or kamal was divided between the Marathas and the Moghals, or when the Nizam became independent, between the Marathas and the Nizam. To the full rental or *kamal* ten per cent wore added for the Maratha sardeshmukhi or overlordship. Taking the whole demand including the overlord's charge at 100, ten went to the overlord. Of the remaining ninety, forty-five went to the Moghals and forty-five to the Marathas. The forty-five parts left to; the Moghals were divided into two groups one of 33% called jagir. and the other of 11% called faujdari. The Maratha share like the Moghal share was divided into two, one of 33% called babti or the chief's share, and one of 11% called *mokasa* or the share given away by the chief. But the divisions of the Maratha share were uncertain, as various claims or amals were granted to the Pant Sachiv and other high officers. [East India Papers, IV. 586 - 587. In other cases, some of the Maratha shares or babtis seem to have been added to the original rental or ain jama. Thus in an example given by Mr. Chaplin the original bigha rate is shown at 8 mans. To this 34ths of a man and three shers are added for sardeshmukhi and for mahalmajkur, ½ a man for sahotra, ¼ of a man for hak chauthai, and 2¼ shers for desai. In addition to the original assessment, extra cesses styled pattis were levied, as examples of which Mr. Chaplin cites a butter cess *qhipatti*, a grain cess *qalla patti*, and a present or sadar-bhet. A house-tax and a female buffalo tax were also levied.

In uplands or *varkas*, where coarse grains were alone grown, an estimate of the crop was made, and from a half to one-third was taken as the government share which was commuted for a money payment at a rate which was established for each village. When rates were fixed

at a *pahani* or survey, the amount of government rent was not changed until a fresh survey was made, [Mr. Chaplin, 20th Aug. 1822, Ed. 1877, 25-27.]

In large villages and in market towns called *peths* and *kasbas* the non-agricultural cesses were collected through the *shets* or leaders of the merchant and craft guilds, who, among the men of their own class, held a position of headship corresponding to the position held by a *patil mukadam* in a village These headmen distributed the assessment among the members of their caste or trade. according to their knowledge of their circumstances, and with the concurrence of the individuals themselves in full assembly. The government demands on traders and craftsmen were regulated by a reference to what it had been usual to collect. New cesses were always resisted with great clamour, and unless the agent of government could support his demands by the documents of previous years, he had great trouble in levying the cess. [East India Tapers, IV. 588.]

After the introduction of the kamal or full settlement about 1760 the revenues were managed by agents who examined the village accounts in detail and settled or wore supposed to settle for the revenues according to the actual state of cultivation, or by fixing, with the head of the village for the payment of a stipulated sum for one year. The kamal which had taken the place of the tankha in the village accounts was the basis of all these settlements. In villages which were just able or were barely able to pay it, the kamal was always demanded and became almost a fixed settlement. In villages which had grown richer since the kamal was fixed, an additional amount was levied either by guess or after examining the increased cultivation. The additional amount levied in this way was generally a perguisite of the local agents and was entered in the accounts under mahal majkur that is sub-divisional charges or under some other suitable head. These agents were spread over the whole Maratha empire and were men of influence and ability. They were of two classes sarsubhedars or provincial governors [According to Mr. Elphinstone's Report (25th October 1819, Ed. 1872, 22) on the territories conquered from the Peshwa, the sarsubhedar was appointed in Gujarat, Khandesh, the Karnatak, and other remote provinces. and subhedars who corresponded to the English Collectors and had charges yielding a yearly revenue varying from £10,000 to £50,000 (Rs. 1,00,000-Rs. 5,00,000). [Mr. Elphinstone (Report of 25th October 1819, Ed. 1872, 24-26) uses the title mamlatdar instead of subhedar. He says the officer in charge of a large district was called mamlatdar; there was sometimes a provincial governor or sarsubhedar between the

mamlatdar and government. Capt. Robertson (May 1820) says that a subhedar sometimes farmed part of his charge to a mamlatdar. East India Papers, IV. 431. Neither the sarsubhedar nor the subhedar was bound to live at the head-quarters of his charge. The management of affairs was usually entrusted to an able and confidential agent or karbhari, on whom all the power of the office devolved. When a district chief or subhedar was appointed he was furnished with an estimate of the revenues of his district with a list of all the authorized charges including militia or shibandis, pensions, religious expenses, and salaries. This estimate was prepared by the secretaries or daftardars of the state under the eye of the Peshwa or of his minister. The tankka, and after the middle of the eighteenth century the kamal, formed the basis of these government estimates, and the changes which had taken place since the introduction of the kamal were calculated on the basis of the payments of the last year. The subhedar's salary, which was generally calculated at one per cent on the revenue of his charge, or £500 to £600 (Rs. 5000 - 6000) a year, and his establishment were next fixed and the amount deducted. The balance which was left, was divided into several sums which at stated periods were required to be paid into the government treasury at Poona. The *subhedar* had to pay the revenue in advance. He generally had to pay half of the amount at the beginning of the year and the rest by instalments but always in advance. [Mr. Elphinstone, 1819, Ed. 1872, 22-24. Capt. Robertson, 1820, East India Papers IV. 430-434.]

When the account year was closed (4th June), the *subhedar* was obliged to furnish detailed statements of the sums he had realized. If it appeared that he had collected more than had been estimated, the subhedar was called on to pay the surplus; if any deficiency had arisen, and if there was no reason to suppose that his accounts were false or his management negligent, he was not obliged to make good the deficiency. As the *subhedar* always paid in advance, at the close of the year there was generally a balance in his favour. Deductions were sometimes made from this balance on the score of embezzlements. The rest was carried over from year to year; the balance was sometimes reduced by partial payments but it was seldom cleared. All balances due to government were exacted unless the subhedar could show that the receipts had fallen short of the estimates without any carelessness or dishonesty on his part. Mr. Elphinstone, 1819, Ed. 1872, 22-24. The eighteenth century subhedar was a government agent whose chief duty in times of peace was to move about his charge redressing grievances, superintending, his officers, and collecting the revenue. He was also a judge and a magistrate, but it

was because he was the collector of the revenue that he held the offices of judge and magistrate.

When the *subhedar* or his representative came to his charge, his first duty was to ascertain with precision how much fresh land had been or was likely to be brought into cultivation in the course of the year. For this purpose he deputed local managers. Those sent to superintend large groups of villages, called a taraf pargana or mahal, were termed kamavisdars or tarfdars and those who had charge of a few villages were called karkuns and shekhdars that is clerks. [East India Papers, IV. 430. According to Mr. Elphinstone (1819, Ed. 1872, 22) the karkun had charge of a considerable number of villages and had under him an officer called shekhdar who had four or five villages. The kamavisdars, tarafdars, karkuns, and shekhdars were appointed by the subhedar. As a check upon them and upon the subhedar there was a set of hereditary officials called fee-men or durakdars because they were partly paid from local fees. Among these were the divan or minister, the *fadnavis* or registrar, and the *potnis* or treasurer, whose duty it was to draw up and sign a yearly statement of the receipts and expenditure in the subhedar's office and to report to government any evil practices of the subhedars [Mr. Elphinstone, 1819, Edition 1872, 22-24. There was a second set of hereditary officers who like the divan and fadnavis were intended to exercise a check on the subhedar chiefly in the interest of the landholders. These were the district superintend or deshmukh and the district accountant or deshpande. Both were generally known by the title of landlords or zamindars. The deshmukh held for a group of villages much the same position as the village headman held with regard to one village and the position of deshpande or group accountant corresponded to the position of the kulkarni or village accountant. [Mr. Elphinstone, 1819, Edition 1872, 18-20. As these hereditary district officers or zamindars were considered chiefly to represent the interests of the cultivators, the village headmen looked to them for help in resisting exactions and in obtaining remissions. The subhedar's staff of kamavisdars, karkuns, and shekhdars, was employed in framing from actual inspection and with the help of patil and kulkarnis, a return of the area of rentalienated land belonging to *inamdars* and others; of the area of arable waste which had been brought under tillage during the year; and of the area of arable which still remained waste. After this examination was completed, the revenue of each village for the current year was calculated from the miras land under tillage or which belonged to resident mirasdars together with the rents due from short rate or ukti and lease or kauli land. This estimate was not the final settlement; it was only the basis on which the dates of paying certain sums were

fixed, until at the close of the year the actual government demand was finally determined. Still the estimate was always near enough to the final assessment to insert it in the *patil's* agreement to pay the village revenue. When the inspectors of the cultivation were ready to submit their labours, it was usual for the *subhedar* to visit each village group called taraf mahal or pargana. The patils of the group met at his office, and after receiving a general assurance that the subhedar would not take more than was usual, gave a written engagement specifying the quantity of cultivated land, the area of waste, and the area granted to new settlers, and promised to realize and to pay the revenue and received a counterpart from the subhedar. On their return to their villages the *patils* began to collect the revenue. If any crops failed after the estimate was framed, the failure was taken into account in fixing the final demand. It was understood by government that, unless he farmed the revenues for the year, the patil was purely a government agent, and that neither he nor the kulkarni was entitled to any advantage beyond heir established rights and salaries. For the same reason if the amount received from a village fell short of the estimate, no attempt was made to recover the balance from the headman or from the accountant. [East India Papers, IV. 431.] The payments of revenue were generally in three instalments, one corresponding with the early or monsoon crops or kharif which was due about November-December, a second corresponding to the cold weather or *rabi* crops which was due in January and February, a third corresponding to the hot weather or tusar crops which was, due in February and March, and a fourth which was sometimes levied about March-April to recover outstanding balances. [Mr. Elphinstone, 1819, Edition 1872, 24-26.] In October or November when the early or principal harvest was nearly ready, the *subhedar* moved through his charge. The headmen and accountants, who were generally accompanied and supported by some of the leading landholders, laid before him the papers showing the old settlement rates, apparently both Malik Ambar's tankha and the kamal of 1760 together with the latest year's payments or vusul akar, and such a statement of extra items as gave a full view of the state of the village. The minute knowledge which the subhedar's staff of clerks called karkuna or shekhdars had of the villages under their charge, enabled the subhedar to check the correctness of the village accounts. Some discussion generally followed in which the villagers looked to the hereditary district officers the deshmukh and the deshpande to help them to gain any remission or concession which they thought they required. The discussion generally ended in the preparation of a final rent statement or jamabandi patla to which the patil gave a formal agreement. If the patil refused to accept the conditions offered by the subhedar, an officer was sent to examine the state of the village crops.

If even then no agreement could be made, the subhedar, though this rarely happened in Poona, arranged to take one-half of the crop. The practice of keeping the village crops under guard until the settlement was made, though unknown immediately round Poona, was common. When one of the three revenue instalments fell due, the subhedar's clerk sent a messenger to each village to help the patil. The Mhar summoned the landholders who paid their rent to the patil in the presence of the village goldsmith or potdar who assayed and stamped the money, and of the accountant who granted a receipt When the instalment was collected, the headman sent it by the Mhar under charge of the under-patil or chaughula with a letter to the deshmukh and another to the *mamlatdar*. At the *mamlatdar's* office the money was again tested by a moneychanger and if any of it was found to be bad, the village goldsmith or *potdar* was made responsible. When the money was accepted the *subhedar* granted a receipt. When the account year closed these receipts were resumed and the patil was furnished with a statement showing the amount of revenue fixed for the year, the dates of its realization, and the balance, if any, outstanding. This statement was ratified by the *subhedar* in the usual way.

A subhedar held his appointment for only one year. His reappointment to his charge depended chiefly on his influence at court and they generally had sufficient address to hold their charge for a considerable period in some cases, according to Mr. Elphinstone, for as much as fifty years. [25th Oct. 1819, Ed. 1872, 24,] Though the subhedar's nominal pay was seldom more than £500 (Rs.5000) or £600 (Rs.6000) a year, and though the system of payment in advance seemed to make any considerable profit impossible, the *subhedars* valued their posts and clung to them as long as they could. They generally succeeded in bringing over to their side both the district hereditary officers who were supposed to represent the people, and the divan, fadnavis, and potdar, who were supposed to represent the government; and, to answer appeals and complaints to head-quarters which under good rulers were encouraged and attended to, the subhedar had an agent or vakil at court. The subhedars added to their income by concealing unusual receipts, by making false entries of remissions, and false musters and by holding back allowances and pensions. Their chief source of profit was under the head of sadilvar that is extra or contingent charges. As a portion of the money spent under this head went to bribe the ministers and auditors, the details were not closely examined and the *subhedar* generally succeeded in keeping more to himself than he paid in bribes. [Mr. Elphinstone, 1819, Ed. 1872,23-24.] Some subhedars let out a few of their mahals

in farms to persons styled mamlatdars. They were vested with all the subhedar's magisterial powers except that they could not pass sentence in capital or other heinous crimes. When the account year came to an end the patil had to continue to perform his duties with vigour without receiving any orders from the subhedar. It made no difference to the patil whether the subhedar was continued in office or a new man was appointed. Sometimes two or three months of a new account year passed before the patils knew who was to be their superior for the coming year. It was necessary that the, patil should take this independent action, because when a subhedar was changed, the former holder of the office was naturally remiss for some time before he left and his successor was at first ignorant of his charge. Considerable liberty was therefore left to the patils in using their discretion as to the means best suited to stimulate the cultivators to industry. Except in years of famine, pestilence, or war, the headman was generally able to induce the people again to take the land which they had tilled in the previous year. Those who were not mirasdars or hereditary holders and had once tilled a field, were generally willing to till it again so long as they had a sufficient stock of cattle. At the beginning of the year (June 5th) the patil's chief care was to encourage hereditary holders to invest their gains in bringing arable waste under tillage; to obtain new temporary holders or upris and to help the old temporary holders to free themselves from the pressure of creditors and to prevent the sale of their cattle and goods or other extreme measures which might force them to leave the village. With this object the patil went to the creditors and persuaded them that if the debtor had time he would pay what he owed; or he promised to lay the debtor's case before the *subhedar* and obtained from him some advance or takavi. To tempt hereditary holders to till arable waste the headman undertook to procure a lease in which, according to the length of time the land had lain waste, the cultivator was allowed part remission of rent during terms varying from four to ten years. [Generally when the land had lain waste for fifteen years an increasing lease or a written istava kaul was granted for ten years. Under these leases no rent was charged for the first year, a ninth part of the full rent was charged in the second year, two-ninths in the third year, three-ninths in the fourth year, and so on till the tenth year when the full rent was levied. Land which had been waste for more than six and was than fifteen years was offered on a lease of six years, free in the first year and Charged a fifth in the second, two-fifths in the third, and so on till in the sixth year the full rent was levied. Land which had lain waste less than six and more than two years was given on a lease of four years with a gradually increasing rental. East India Papers, IV. 432.1 Holders of these leases were free from the demands, which the

hereditary holders generally had to pay as donations to holy men especially *gosavis*, and contributions to travelling tumblers and musicians. The headmen expected that a man who had enjoyed a rising lease would continue to hold the land at least for a year or two after the full rent became due. During those years they continued free from the extra levies to which the regular holders of village lands were liable. Besides the village rent the patil had to see that all payments in kind to government were duly made and that the village and group officers received their dues. If a cultivator either refused or evaded payment, the patil called on the government messenger to interfere. The messenger heard what the defaulter had to say. If he thought the headman was acting unjustly or that the defaulter was really unable to pay, he took him to the *subhedar* who, if the defaulter's a explanation satisfied him, granted him a complete or a partial remission. If the messenger thought the landholder had no good reason for refusing to pay, he would punish him by making him sit in the sun, by keeping him fasting, or by placing him in durance in the village guard-house or chavdi. If this treatment failed to make the defaulter pay, the messenger took him to the mamlatdar, who if he pleased might inflict slight corporal punishment, handing him roughly, pulling and pushing him about, and thumping him on the sides and back If the *mamlatdar* was no more successful than the messenger, the defaulter was reported to the *subhedar* who ordered that his bullocks and property, and, if he was a mirasdar and the case was extreme, his land should be attached. If the amount realized from the sale was less than the sum he owed, the debtor was thrown into prison with fetters on his legs until it was fully ascertained that he had no other resources, when he was set at liberty.

If a *patil* proved refractory and refused to obey the summons of the local officer, the *subhedar* sent a messenger or a horseman to the village with a written order to the *patil* to pay the bearer a certain sum every day varying from 2s. to £5 (Rs.1-50) in pro-portion to the *patil's* wealth or to the gravity of his offence. If a *patil* persisted in not obeying the summons, and also in refusing to pay the fine, militia or *shibandis* were sent to bring him by force and he was then fined. Rigorous treatment either of a landholder or of a headman was seldom necessary in recovering the regular revenue. It was more employed in exacting extraordinary taxes [Mr. Elphinstone, 1819, Edition 1872, 22-26.] The *patil* was bound to recover within a year all advances that is *tagai* or *takavi* which the *subhedar* had made. These advances were never made to the landholders direct. They were made through the *patil* and at his request. And though the persons to whom the advances were made were still insolvent and required further help

from government, the money was generally resumed at the close of a year and if the *subhedar* chose, a fresh advance was made for the new year. The *patil* frequently furnished cultivators with means of recovering themselves by lending them money; if the cultivator was unworthy of this indulgence and failed to pay back the advance the *patil* was bound to make it good. Under this system of land management distraints were rare. If a temporary holder or *upri* led and the rest of the villagers would not make good what he owed, his bullocks were sold. Government never sold a *mirasdar's* field or his bullocks though a *mirasdar's* relations might occasionally force him to part with some of his property to make good sums which they had paid to government on his account. [East India Papers, IV. 526]

There were local varieties in the system of land management, and conditions varied with the character of the times and the character of the Peshwas. Till the beginning of British rule the Peshwa Madhavray (1761-1772) was remembered with affection for his moderation, and Sakharam Bapu and Nana Fadnavis with respect for their masterful knowledge tempered with justice and kindness. [Capt. Robertson, Collector, 1st May 1820, East India Papers IV. 427-434; 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 479-508.] The cultivators were said to have been in a state of comparative prosperity under Peshwa Madhavrav Narayan (1774-1796) and traces of former prosperity remained. In those times the government collected its revenues through its own agents; the maximum of the land-tax was fixed, and only charged on lands actually under tillage; while remissions were made in bad seasons, and in cases of great distress sums of money were advanced without interest or on a moderate interest. The revenues fluctuated according to the prosperity of the country. [Loni Account, 1820, Trans. Bom. Lit. Soc. III. 227.]

Between 1772 and 1800, the years of the administration of Nana Fadnavis, the management of the Peshwa's land revenue was perhaps more efficient than at any other time. The *mamlatdars* or *subhedars* were chosen from families of character and respectability. The office was given to trustworthy persons without any special agreement as to the amount of revenue their charge would supply. On their appointment they sometimes though not always paid a portion of the revenue to the treasury. Each received a deed or *sanad* enjoining the faithful discharge of their duty, and directing them to adopt as a guide a separate account of the assets and expenses of their charge. The deed or *sanad* also instructed them to ascertain what collections of the current year their predecessors had made, to credit them for the charges in proportion to the period they were in office, and to realize

the balance after taking the late *mamlatdar's* acknowledgment of the amount outstanding. At the same time the former mamlatdar received an order directing him to give over to his successor the charge of the district with all its forts, garrisons, and magazines, to transfer to him all collections after deducting allowances or charges up to the period of his removal, and to certify to him the amount of arrears due, whether from the district land revenue or from other sources. The commandants of the forts were also ordered to place themselves under the direction of the new *mamlatdar*, and the hereditary district officers or zamindars were enjoined to acquaint the new mamlatdar with the resources of their charge. If his charge was important and contained a fort, the yearly pay and allowances of a *mamlatdar* amounted to about £430 (Rs. 4300). If his charge was rich but corbained no fort his pay and allowances amounted to about £240 (Rs. 2400). [The pay and allowances of the Shivner charge which had a fort and yielded a yearly revenue of £10,200 (Rs. 1,02,000) amounted to Rs.4279. The details were Pay Rs. 1000, a palanguin Rs. 800, oil Rs. 18, palanguin furniture Rs. 63, cloth Rs. 40, a house allowance or karkuni from the secret service or antast fund Rs. 2,358; total Rs. 4279. The details for Junnar, which had no fort and yielded £11,574 (Rs. 1,15,740), were Pay Rs. 2000, clothes Rs.21, palanguin furniture Rs. 75, firewood Rs.275, total Rs. 2371. Appendix to Mr. Chaplin's Report, 20th August 1822 Edition 1877, 145-146, East India Papers IV. 625. When a new mamlatdar came to his charge, if it was an important charge, he found two sets of local hereditary officials, one set called feemen or darakdars The fee-men or darakdars were generally though not always hereditary. Mr. Elphinstone, 1819, Edition 1872, 22.1 because they were partly paid by local fees, some of whom were district and others were fort officers, and another set known as landlords or zamindars, the hereditary superintendent or deshmukh and the hereditary accountant or deshpande of a group of villages. [In some tracts there were no hereditary district officers. In such places their duties were performed by the fee-officials or darakdars. Appendix to Mr. Chaplin's Report of 1822, Edition 1877, 156; East India Papers IV. 631. None of these hereditary officers could be dismissed by the mamlatdar, nor could he employ them on any duties except those which were specially prescribed to them. The fee-men or darakdars both of village groups and of forts received their pay and allowances in the same way as the mamlatdar. They were of three classes subha*nisbati* or provincial, *mahal* or divisional, and *killedari* or belonging to forts; in the provincial staff there were besides twelve karkuns or clerks, eight members, the minister or divan, the auditor or mujumdar, the registrar or fadnavis, the secretary or daftardar, the treasurer or potnis, the assay clerk or potdar, the petty registrar or

sabhasad, and the under secretary or chitnis. Of the district or provincial fee-men or darakdars the chief was the minister or divan who as chief factor under the mamlatdar counter-signed all letters and orders. He received about £59 (Rs. 590) a year of which £35 (Rs. 350) were pay and £24 (Rs. 240) expenses or karkuni. The auditor or mujumdar approved deeds and accounts before they went to the registrar or fadnavis. He received £49 (Rs. 490) of which £25 (Rs. 250) were pay and £24 (Rs. 240) were expenses. The registrar or fadnavis dated all deeds and orders, prepared a daily waste book, fastened notes to the money-bags dated the yearly village rent settlement, and brought the books to head-quarters. He received £61 (Rs. 610) of which £20 (Rs. 200) were pay, £9 (Rs. 90) allowances for assistants, and £32 (Rs. 320) expenses. The secretary or daftardar, from the registrar's waste book, made up the ledger and sent a monthly abstract to head-quarters. He received £28 (Rs. 280) of which £15 (Rs. 150) were pay, £1 (Rs. 10) for clothes, and £12 (Rs. 120) for expenses. The treasurer or potnis kept a record of collections and the balance of cash, and helped in writing the waste book and the ledger. He received £15 (Rs. 150) of which £13 (Rs. 130) were pay and £2 (Rs. 20) expenses. The assay-clerk or *potdar*, of whom there were always two, examined the coins. They received £21 (Rs. 210) between them. The petty registrar or sabhasad kept a register of petty suits and reported them to the mamlatdar. He received £25 (Rs. 250). The under-secretary or chitnis wrote and answered despatches. He received £17 (Rs. 170) of which £12 (Rs. 120) were pay, £1 (Rs. 10) were for clothes, and £4 (Rs. 40) were expenses. The twelve clerks or karkuns had an average pay of £20 (Rs. 200). If any of them went to head-quarters for the audit of accounts he was paid £35 (Rs. 350) extra. Each division or village group, called mahal or taraf, had three revenue officers, a deputy or havaldar, an auditor or mujumdar, and a registrar or fadnavis, and four militia or shibandi officers, the ashamnavis, the registrar or asham-fadnavis, the roll-master or haziri-navis, and the secretary or asham-daftardar. Of the three revenue officers the deputy or havaldar made and remitted collections and inquired into potty complaints. Besides an uncertain sum for expenses or karkuni, he received £29 (Rs, 290) of which £20 (Rs.200) were pay, £5 (Rs. 50) were for oil, £2 6S. (Rs. 23) for an assistant, and £1 14s. (Rs. 17) for clothes. The divisional auditor or mahal mujumdar had on a small scale the same duties as the provincial auditor. He received about £35 (Rs.350) of which £10 (Rs. 100) were pay, and about £25 (Rs. 250)allowances. The divisional registrar or mahal fadnavis had duties corresponding to the duties of the provincial registrar. He received about £37 (Rs. 370) of which £12 (Rs. 120) were pay, and about £25 (Rs. 250) were allowances. Of the four militia or shibandi officers the

asham-navis kept a roll showing each man's name family name and village, his arms, and his pay. Ho received £53 (Rs. 530) of which. £25 (Rs. 250) were pay, £7 (Rs. 70) were for oil and an umbrella, and £21 (Rs. 210) for expenses. The militia registrar or asham-fadnavis kept the accounts, and, if there was no muster-master, wrote out the musters. He received £30 (Rs. 300) of which £20 (Rs. 200) were for pay and £10 (Rs. 100) for expenses. The muster-master or hazirinavis mustered and made out the abstracts. The military secretary or asham-daftardar made out the militia ledger-book. He received £27 (Rs. 270) of which £15 (Rs. 150) were for pay and £12 (Rs. 120) for expenses. To all forts of any size a staff of six civil officials was attached; a havaldar or deputy-commandant, a sarnaubat or assistant deputy, an accountant or salmis, a registrar or fadnavis, a storekeeper or fadnavis of stores, and a clerk or karkun. The deputy commandant or havaldar, arranged all quards and patrols and gave leave to people to go out and in. He received £36 (Rs. 360) as pay. The assistant deputy or sarnaubat was under the deputy and superintended public works: he received £21 (Rs. 210) pay. The accountant or sabnis wrote out the garrison accounts and reported enlistments and discharges. His pay was £22 (Rs. 220). The registrar or fadnavis dated and certified the accounts and kept a record of receipts and payments. He received. £19 (Rs. 190). A storekeeper or fadnavis of stores was sometimes kept on £16 (Rs., 160). The writer was paid £10 (Rs., 100). In addition to their pay and allowances these fee-men or darakdars had, according to their rank, a following of a certain number of militiamen, and those who were connected with forts made percentages in supplying wood, betel, and other articles.

When a mamlatdar was appointed to a new district he either went himself or sent his agent or karbhari to take over charge from the former mamlatdar. He next summoned the district hereditary officers or zamindars and the heads of villages, each of whom, according to rule, from the *deshmukh* or district superintendent and the *deshpande* or the district accountant to the shet mahajan or alderman and the village mukadam or headman, paid his respects and presented the new mamlatdar with an offering or nazar. At this reception the mamlatdar delivered to the district officers the head-quarters' mandate enjoining obedience to his authority. When the reception was over the mamlatdar transacted business in office which was usually attended by the district superintendents and accountants or by their deputies. The district superintendent or deshmukh and his people helped in the general management of the revenue and the district accountant or deshpande furnished records and kept an account of the collections. Under Nana Fadnavis the duties of the district accountant

or deshpande were to take from each village accountant in his charge a statement of the village areas and the rates of assessment in his village and from these returns to draw up comparative abstracts showing how the details of the current year differed from those of the year before. These differences he had to explain to the *mamlatdar*. East India Papal IV. 631. His clerk wrote all requisitions to the villagers which were dated and signed in due form by some of the feemen or darakdars and confirmed by the mamlatdar. When the heads of villages were present an account of each village was drawn up and signed by the headman and accountant, and countersigned by the outgoing mamlatdar. When this was finished a statement of the actuals of the past year was made ready and sent to head-quarters by the mamlatdar's agent. Next an estimate or aimas of the next year's resources was prepared. The traditional total rental whether Malik Ambar's tankha or the Maratha kamal was entered, and from it was taken the value of all rent-grants or inams. The balance formed the ain jama or regular receipts as opposed to shivaya or extras which included customs, farms, fines, and presents.

Under the head of charges came permanent military and other allowances and revenue assignments, cost of establishments, pay of militia and messengers, and religious and charitable allowances. The balance was then struck and divided into two parts, one to. be forwarded to government the other to be kept in hand. The amount to be sent to government was fixed with reference to the remittances of the previous year with such changes as the character of the season made necessary. Part of the amount due to government was usually paid in advance in July or August. The rest was divided into three or four instalments, the payment of which was not very uniform. The share of the revenue which was kept in hand was on account of interest due by government on advances, premium paid for bills of exchange or remittances, new: allowances granted during the year, and remissions for destruction of crops or other contingencies. The mamlatdar was enjoined not to hold back any items which could be recovered and which belonged to government and to take care that all produce sales were made at the season when the best prices were likely to be secured After these formalities the estimate was approved by the minister and confirmed by the Peshwa's sign manual. A copy was then delivered to the mamlatdar. In some parts of the district especially near the Nizam's possessions, the lands were farmed from year to year. Abatements were granted to the farmer on account of the charges of the government officers and of charitable and religious allowances. He was made to promise that he would keep back none of these payments, and an assurance was given that in the event of any

calamity he should receive the usual consideration. As regards the relations of the mamlatdars with the people the mamlatdars managed their charges through the hereditary officers and the village headmen and accountants. In each village the mamlatdar examined the jamin *jhada* or register of lands, the receipts and charges of the past year, and the present state of cultivation. He called for accounts of the particular fields under tillage, ascertained whether they grew dry-crop garden produce or rice, whether they were tilled by hereditary or by temporary holders, whether they were held at a fixed contract rent or on a lease, fie learned from the village and district officers what area of arable land had become fallow and why it had become fallow. If necessary he appointed agents to promote cultivation in particular villages and empowered these agents to grant leases for the tillage of waste lands, or made such concessions to the heads of villages as in their opinion would persuade the people to enlarge the area under tillage. He also by advances or remissions helped the people to buy seed or cattle. In fixing the rent settlement or jamabandi of a village, particulars of the cultivation were entered and if necessary checked by an actual inspection of the lands. With the help of the headmen and the accountants the whole of the village lands were entered and all grants were deducted. The rest was divided into waste and cultivated, and the cultivated area was divided into dry-land and garden. It was stated whether the garden was watered by wells or by watercourses, and whether it was held by hereditary or by temporary husbandmen. The details, the rates of assessment, and the produce of the whole, were shewn, together with the items of the different cesses. From the gross assets or jama were taken the amounts due to district and village officers, the village charges and the permanent assignments on the village revenue. The balance formed the settlement or beriz. From the settlement in some cases a sum for official expenses or darbar kharch was taken, and in others for grantees and alienees to whom certain shares in the village revenue had been assigned. When all these demands were adjusted what was left was sent to the public treasury by instalments in November December and January. The instalments seem not to have been fixed according to any uniform scale. They depended a good deal on the agreement between the mamlatdar and the villagers, and on the time at which the settlement was concluded. If the settlement was not made till the year was far advanced, the same instalments were paid as in the past season and the amount was adjusted when the rent settlement was ended.

The following were the proportions in which rents were collected at different dates. In villages which had both an early or *kharif* and a late or *rabi* crop, the first or *Dasara* instalment was levied in October or

Ashvin. The amount was small. In Kartik that is November twenty-five per cent of the revenue became payable; in January-February twenty-five per cent more; in February-March twenty-five per cent, and the remainder in March-April. In villages which had a small early harvest and a heavy late harvest, the early instalments were lightened and about one-half was kept for the March-April payment. On the other hand in villages whose harvest was chiefly of early crops the early instalments were the heaviest. The village collections were generally begun eight or ten days before the date fixed for sending the instalment to the mamlatdar. If from special circumstances rents were difficult to realize, the mamlatdar forbore from pressing the people. Village rents were often partly paid by orders or havalas on bankers; similarly the husbandmen paid the headman by orders; and so general was this practice that not more than one-fourth of the revenue was paid directly in cash.

Though as a rule the distribution of the assessment among the villages was made by the headman and village accountant, the mamlatdar, if he doubted either the honesty or the authority of the headman, might distribute the assessment among the villagers either himself or by an agent. All local coins were accepted in payment of the government dues. But if they fell much below the proper value an additional cess or allowance was levied. In collecting arrears considerable indulgence was shewn. If the exaction of arrears was likely to cripple a husbandman so that he could not till his land, the demand was put off till the next year or it was cancelled. It was the practice for the mamlatdar to grant receipts for all formal payments, but as a rule the village accountants gave the husbandmen no receipts. [Appendix to Mr. Chaplin's Report, 20th August 1822 (Ed. 1877), 144-162. East India Papers, IV. 624-633, 636. At the end of the year, after all the collections had been made, the *mamlatdar* delivered to the villagers a demand collection and balance account showing the original rent settlement, including all branches of revenue both in money and kind except the secret-service or antast items, the remittances that had been made to his treasury, and the charges that were admitted. In exchange for this he took a voucher, in the handwriting of the village accountant and signed by the headman, of the actual receipts and disbursements, together with a copy of the *vasul baki* or balance account. All vouchers given in acknowledgment of remittances were then received back by the *mamlatdar* and deposited among the divisional records, The chief items of extra revenue or shivaya 'jama' which the mamlatdar entered in the public accounts were: a marriage tax or lagan takka, a remarriage tax or pat dam, chithi masala, khand gunhegari, nazar, harki, karz chauthai, and baitanmal.

At the close of the year, either the *mamlatdar* himself or his registrar or secretary delivered the following accounts into head quarters: the *mahalki jhadti* or rough statement of receipts and charges; the rent settlement of each village with the signatures of the hereditary district officers; a muster-roll of the militia and the receipts for their pay; an establishment list or *moin jabta* with a record of absentees; a statement of receipts of pensions and allowances; a customs contract; a list of articles supplied to forts; and a statement of official expenses or *darbar kharch*.

At Lead-quarters these accounts were compared with the estimate which had been framed at the beginning of the year. If the statements agreed and the full revenue was realized, the chief clerk read them over to the Peshwa and they were passed. If there were any differences in detail between the estimates and the actuals a *taleband* or variation statement was prepared. If the variations resulted in a failure of revenue, unless the *mamlatdar* was a confidential servant, an inquiry was made and if necessary the *mamlatdar* was called on to pay the differences. If a *mamlatdar*, by paying the revenue in advance and failing to realize the whole of it or by being forced to engage a special body of militiamen to keep the peace, spent more than he had received, subject to certain small deductions, the government granted interest at twelve per cent a year on the amount which stood at the *mamlatdar*'s credit.

The particular points to which the attention of the head-quarter officers was directed, were to collect from time to time balances due by *mamlatdars*; to inquire into and redress complaints; to make arrangements for establishing the authority of government in any district where it might be disputed; and to superintend the *mamlatdar's* administration of civil and criminal justice, who generally inflicted all sort of capital punishments without a reference to headquarters.

Mamlatdars were seldom removed for petty faults. Many of them remained thirty or forty years in the charge, and on their death were succeeded by their sons. So too the feemen or darakdars were not removable except for misconduct and the office frequently passed from father to son. If a charge of misconduct was brought against a mamlatdar the accuser was required to give security that he would prove the charge. If he proved the charge he was rewarded; if the charge seemed to have been honestly brought and the mamlatdar's conduct seemed doubtful, the informer was allowed to go without punishment; and if the charge seemed groundless, the informer

forfeited his security. Charges of misconduct were rare. The Marathas disliked informers and made sport of them calling them *Taskar Pant* or Mr. Thief.

The revenue functions of the *mamlatdars* differ little from those which have been already described as belonging to the time before Nana Fadnavis. The mamlatdars were expected to promote the improvement of the country, to protect all classes from oppression, to dispense civil justice, and to superintend the police. They were not forbidden from taking any advantage they could from trade or from lending money at interest, and they were often connected with the moneylenders who advanced part of the revenues of villages. Such a connection must often have been prejudicial to the people, but under Nana's management abuses were restrained within narrow limits. The village headmen and accountants had the immediate duty of superintending the cultivation and of seeing that it was kept up to the usual standard. If there was any falling off owing to the death or emigration of hereditary holders, the other hereditary holders were expected to cultivate the fields which were given up. If the falling off was due to the poverty of temporary holders, it was the duty of the headman to persuade others to take the vacant land. To help him to persuade people to take up waste; the headman was allowed to make trifling abatements of rent. But if any great or unusual reduction was required, he had to apply for sanction to the mamlatdar. The headmen and accountant furnished all the village accounts to the mamlatdar, sometime through the hereditary district officers and sometimes direct. In country towns the collection of the house and other nonagricultural cesses was entrusted to aldermen and heads of the communities of merchants and craftsmen. In the smaller towns these collections were made by the village headman and accountant.

The rent settlement or *jamabandi* of the villages was fixed by the *mamlatdars*. In making the individual settlement the village headmen added to the rent settlement the sum deducted in the *tharav yadi* on account of village charges and other expenses, and distributed the whole among the people. [In some villages the village charges were kept separate. East India Papers, Iv.635.] Any deficiency that might arise in distributing the settlement was made good by a second levy or *patti*. If even after the second levy a deficiency remained the amount was raised by a loan from a moneylender. The lone was sometimes repaid by a special cess or *patti* in the following year, or if this was likely to cause distress, the *mamlatdar* got leve to remit an equal amount to enable the villagers to liquidate the debt. If the loan was large, this was the usual course; if it was small, the inhabitants

themselves usually agreed to make it good The first instalments of the revenue were collected before any settlement was made, according to the individual payments of the preceding year, and considerable indulgence was shown in exacting balances whose realization was likely to cause severe pressure, As regards the local charges on the village revenue the amounts once sanctioned Were continued without fresh instructions until resumed The permanent yearly village charges were also incurred on the authority of the headman and accountant, but excessive disbursement were, when ascertained, retrenched and brought to the public account. If a village fell into arrears, lands thrown up by the holder or left waste were sometimes sold and transferred on hereditary tenure to other holders. Petty quarrels among the villagers as far as possible were settled by the headmen and accountants. Except when they were serious and the mamlatdar's authority was required, disputes about land were settled on the spot. The petty village officers or *balutidars* received their usual fees from the villagers for whom they performed the customary services. These petty officers could not be removed by the headman and accountant. If they were guilty of grave misconduct, the matter was represented to the mamlatdar who punished or dismisses the offenders. At the end of the year when the headman and accountant rendered returns of receipts and charges and received a balance or jama vasul baki statement, the *mamlatdar* presented them with an honorary dress or shirpay. It was not usual for the headman and accountant to grant landholders any receipt for their payments. The relations between them made such a security unnecessary. [Appendix to Mr. Chaplin's Report of 20th August 1822, Ed. 1877, 144-162 and East India Papers IV. 624-636.]

Under the system which has been here described, with, as a rule, men of ability and position in charge of the same districts for long terms of years, and with the provision that the weight of all general calamities and of most minor losses should fall on the government and not on the people, in spite of the terrible period of distress caused by the famine of 1792, the bulk of the landholders remained in their hereditary estates till the close of the eighteenth century. [Captain Robertson, 1st May 1820, East India Papers IV. 434.]

Early in the nineteenth century the wasting of the district by Holkar in 1802 and the failure of the late rains of 1803 caused grievous distress. For a year or two the assessment fell to about one-fourth. [Bom. Gov. Rev. Rec. 698 of 1836, 85.] At the close of 1802 when the disorders among the Marathas had reduced the country to a desert, the Peshwa saved his possessions from future desolation by placing himself under

British protection. So great was the security which accompanied the transfer of the sovereign rights to the British, that, within a few years, the Peshwa was able to collect as large a revenue as before the destruction of 1802 and 1803. [Bom. Gov. Rev. Rec. 698 of 1836, 85. The incursions of plundering armies and a succession of calamitous seasons had nearly depopulated the Indapur sub-division When in 1807 the villages were re-established on kaul or istava leases providing for a yearly increase of revenue till the ninth year when the full tankha (kamal?) rates were to be taken. This settlement only partially succeeded. A further term was added to the leases during the currency of which the war broke out and the Deccan fell into the hands of the British, Bom. Gov. Rev. Rec. 666 of 1835, 6-7.] Partly apparently from the disordered state into which the miseries of 1803 had thrown the management of the country; partly perhaps because the support of the British to a great extent made it indifferent to him whether the people were contented or were discontented, Bajirav gave up the former attempt to improve the country by securing men of honour and position to administer its revenues, and to prevent their misconduct by complicated checks. In its stead he introduced the practice of farming the revenue for short terms to the highest bidder. [Soon after Bajirav became Peshwa, the system of collecting revenue through government agents was laid aside and that of farming the revenues from year to year to the highest bidder was adopted. All intercourse between the government and the landholders ceased, and the landholders fell into the hands of a Bet of greedy and unprincipled contractors. The consequences were certain. The contractors made the most of their leases by every temporary experiment; the husbandmen were urged to cultivate beyond their means, and taxed for lands not even cultivated; remissions were not made in times of calamity. The people became loud in their complaints against the prince who thus abandoned them; and ultimately there were frequent defalcations of revenue, from the contractors being unable to realize their rents. Dr. Coats' Account of Loni, 1820, Trans. Bom. Lit. Soc. III. 227.] The new system had the two great advantages of relieving the central government of a great mass of labour and responsibility, and of transferring a great part of the loss from failure of crops and other causes from the state to the revenue contractor and to the people. According to Mr. Elphinstone the changes introduced by farming the revenues were aggravations of the evils of the former system rather than complete innovations. The office of *mamlatdar*, instead of being conferred as a favour on a person of experience and probity, was put to auction among the Peshwa's attendants, who were encouraged to bid, and were sometimes disgraced if they were backward in bidding. Next year the same operation was repeated and the district was

transferred to a higher bidder. The revenue farmer had no time for inquiry, and no motive for forbearance He let out, his district at an enhanced rate to under-farmers who repeated the process until the farming came down to the village headmen. If a village headman farmed his own village, he became absolute master of every one in it. No complaints were listened to and the *mamlatdar* who was formerly a check on the headman now urged him to greater exactions. If the headman refused to farm the village at the rate proposed, the case of the villagers was perhaps worse, as the mamlatdar's own officers levied the sum required with less knowledge and less pity. In either case the actual state of cultivation was disregarded. A man's means of paying, not the land he held, fixed the amount at which he was assessed. No moderation was shown in levying the sum fixed Every pretext for fine and forfeiture, every means of rigour and confiscation, were employed to squeeze the people to the utmost before the day when the mamlatdar had to give up his charge Amidst all this violence a regular account was prepared, as if a most deliberate settlement had been made. In this fictitious account the collections were always underrated, as this enabled the headman to impose on the next mamlatdar, and enabled the outgoing mamlatdar to deceive the government and his fellows. The new mamlatdar pretended to be deceived; he agreed to the most moderate terms, and except making advances, gave every encouragement to increase the cultivation. When the crops were in the ground, or when the end of his term drew near, he threw off the mask, and plundered like his predecessor. In consequence of this, the assessment of the land, being proposed early in the season would be made with some reference to former practice, and contingent and other charges would accumulate, until the mamlatdar came to make up his accounts. Then his exactions were most severe. He had a fixed sum to complete, and if the collections fell short of the sum, he portioned the balance among the exhausted villages, imposed an extra assessment, and left the headman to extort it on whatever pretence and by whatever means he thought proper [Mr. Elphinstone, 1819, Ed. 1872, 27-28, East India Papers IV. 166-167. As the villagers were very often unable, with any amount of pressure, to pay the sums which were demanded of them, the payments were usually made by drafts on the moneylender, who had the chief banking business in the village. Little was collected in cash. The moneylender stood security and in return was allowed to collect the revenue and his own debts together. [Col. S. Anderson in Deccan Riots Commissioners' Report, 1875. para 32 pp. 17-18.]

The section of the people who suffered chiefly under the farming system were the hereditary and other well-to-do holders. In spite of

the disorders of the eighteenth century and of the famine of 1792, at the close of the century the bulk of the *mirasdars* were still in possession of their hereditary holdings. But under Bajirav's forming system, when the amount of his collections fell short of what he had undertaken to pay, the farmer turned on the hereditary holders and robbed them with such ingenious greed that many left their lands and all were brought to the brink of ruin. [East India Papers, IV. 434.] In spite of the exactions of the farmers which reduced almost all the landholders of the district to one level, so great was the advantage of the security ensured by the British protectorate that in the thirteen years before the overthrow of the Peshwa in 1817 the district increased greatly in wealth. Bajiray, whose chief interest in government was to collect money, amassed a sum estimated at £5,000,000 (Rs. 5 krors). And the state of the bulk of the people is said to have improved from what it was at the beginning of the century. They had much wealth in flocks and herds which were less exposed to the greed of the revenue farmer than the outturn of their fields. [Col. S. Anderson in Deccan Riots Commissioners' Report, 1875, para 32 pp. 17-18. At Bajirav's restoration the country was laid waste by war and famine, the people were reduced to misery, and the government derived scarcely any revenue Bom its lands. Since then, in spite of the farming system and the exactions of Bajirav's officers, the country has completely recovered, through the protection afforded it by the British Government; and Bajirav has accumulated those treasures which he is now employing against his benefactors. The British Government not only protected the Peshwa's own possessions, but maintained his rights abroad.' Mr. Elphinstone's Satara Proclamation, 1818, in Forrest's Elphinstone, 1884, 53.]

SECTION III - BRITISH MANAGEMENT

The British, 1818-1884.

As regards land administration, the sixty-six years (1818-1884) of British management fall tinder two nearly equal divisions, before and after the year 1854 when the introduction of the regular thirty years' revenue survey settlement was completed. The thirty-six years ending 1854 include two periods before and after the introduction of the survey settlement of 1836. Of these periods the first on the whole was a time of stagnation or decline, and the second was a time of progress. The establishment of order, together with the removal of abuses and the high prices of field produce, caused in the first four years of British management (1818-1822) an increase both in tillage and in revenue. This was followed by about fourteen years of very little progress or

rather of decline, the district suffering from bad harvests or from the ruinous cheapness of grain due to large crops, small local demand, the want of means of export, and a reduction of money caused by the stoppage of the inflow of tribute and pay which used to centre in Poona as the Peshwa's head-quarters. The result was a considerable fall both in tillage and in revenue. The assessment introduced at the beginning of British rule when prices were high about forty pounds the rupee for Indian millet, [At Indapur the Indian millet or jvari rupee] prices were about 97 pounds in 1817, 48 in 1818, 34 in 1819, 39 in 1820, and 64 in 1821, 1822, and 1823. Bom. Gov. Sel. CVII. 118, or CLI.96, pressed heavily on landholders in seasons either of bad crops or of low prices. Consequently the leading features of the revenue system, before 1836 were high assessment and large remissions. [Most writers have agreed that the rates first introduced by the Britsh were too high. Sir G. Wingate wrote about 1840: There could be little doubt that the early Collectors over-estimated the capability of the Deccan and that the rates drained the country of its agricultural capital. Deccan Riots Commissioners Report 1875, para 33 pp. 18-20. According to some accounts one cause of distress was the falsifying of village records by the hereditary officers. Lieutenant Shortrede, 1st October 1835, Bom. Gov. Rev. Rec, 698 on 1836,85-86.] About 1825, with a view to relieve the distress, Mr. Pringle was appointed to survey the district and revise the assessment. His survey settlement was introduced over the whole district between 1829 and 1831. The measure proved a failure partly from the heaviness and inequality of the assessment and bad seasons and low prices, and partly from the evil practices of Mr. Pringle's native establishment. The defects of the settlement were early foreseen by the revenue officers, and, in Indapur and other parts of the collectorate, the new rates were either not levied or were soon discontinued, and the difference between the amount due and the amount collected was shown as a remission. About 1835 the regular revenue survey was undertaken. The first settlement quaranteed for thirty years Was introduced into Indapur in 1836-38, and the last into Maval in 1853-54.

1817-1820.

After the battle of Kirkee in November 1817 the greater part of the present district of Poona fell to the British and by the close. of the year all local disturbance had ceased. The only parts of the district which suffered from the war were Haveli, Junnar, and Sirur, through which the Peshwa Bajirav passed on his way to the Berars. [Captain H. D. Robertson, Collector, 1st February 1825. Bom. Gov. Rev. Rec. 117 of 1825, 509.] The chief measures adopted by the English were to

appoint (April-June 1818) a Collector of Poona to travel over the district and control the collection of the revenue and also to act as district magistrate and circuit judge. The officer appointed was Captain H. D. Robertson. [Heber's Narrative, III. 120. Captain Henry Dundas Robertson had charge of the city and district of Poona of which he was Collector of Revenue, Judge, and Magis-trate. His district lay between the Nira and Bhima. Grant Duffs Marathas 679.1 The straggling charges of the Maratha mamlatdars were formed into compact subdivisions yielding a yearly revenue of £5000 to £7000 (Rs. 50,000-Rs. 70,000), and over each a mamlatdar on £7 to £15 (Rs.70-150) a month was place. Mr. Elphinstone, October 1819, Ed. 1872, 30, 31, East India Papers IV. 168-169. One of the chief difficulties in starting the new administration was the want of men suited to be mamlatdars. As the British occupied the country before the Peshwa's cause was desperate, few men of local position or training at first entered the English service. The English were forced to employ what men they could find without much regard to their merit. Still when the struggle with the Peshwa was over and the final treaty was concluded, the Collector was able to secure a fair number of respectable servants of the government. A few mamlatdars were brought from Madras, partly from motives of general policy and that they might act as a check on local corruption, and partly to introduce some models of sytem and regularity. The Madras mamlatdars were more active, more obedient, more exact, and more methodical than Maratha Brahmans. They introduced new forms of respect for their immediate superiors and at the same time showed less consideration to the great men of the country. To the bulk of the people their bearing was rough, harsh, and insolent. It was interesting to consider which of these characteristics the Ifadrasis had taken from the Musalmans and which from the English. Mr. Elphinstone, 25th October 1819, Ed. 1872, 30-31, East India Papers IV. 168-169. The chief change, in fact almost the only intentional change, introduced in the revenue management was abolishing revenue farming. Farming was abolished in all departments except in the customs where there were no complaints, and apparently no oppression. In other respects as far as possible the existing system was maintained. The object was to levy the revenue according to the actual cultivation; to lighten the assessment; to introduce no new cesses; and to abolish no cesses except the obviously unjust. The orders were above all things to avoid innovations. In spite of the efforts to avoid innovations the introduction of foreign rulers and of foreign maxims of government caused many changes. In the revenue department Mr. Elphinstone believed that most of the changes were beneficial. The improvement was not so much in the rules as in the way of carrying out the rules. Faith was kept with the landholder, more liberal advances were made, he was free from false charges as pretexts to extort money, and his complaints found a readier hearing and a surer redress. On the other hand some of the new ways were distasteful to certain sections of the people. There were more forms and there was more strictness. The mamlatdars disliked the narrow limits within which their discretion was bounded; they preferred the old system of perguisites to the new system of pay. The heads of the villages saw that the minuter inquiry into the distribution of the Government rental among the villagers weakened their power, and that the closer examination of the village charges or sadilvar kharch reduced their incomes. In the minds of the people, against the advantage of a decrease in village charges, was set the blank caused by the stoppage of former charities and amusements. Every effort was made to ascertain the condition of the landholders and to make the assessment light. Where there was any suspicion of fraud lands were measured. During the first two years (1817-1819) the Collector settled with the headman for the payment of the whole revenue of the village, and gave him a deed or patta. After the first season, before the settlement was concluded the Collector ascertained how much each landholder had to pay and that he agreed that the amount set against him represented his fair share. In all cases the foundation of the assessment was the amount which the village had paid when the people considered themselves well governed. From this amount deductions were made either because of a reduction in cultivation or on other specific grounds. The assessments were much lighter than formerly and much clearer and more uniform. ['Mr. Elphinstone, 1819, Ed. 1872, 30-32, East India Papers IV. 168-169.]

The chief difficulty in the way of a satisfactory village settlement was the want of records. Under the farming system the village records ceased to be used. Occasionally papers handed down from the earlier mamlatdars and fee-men or *darakdars* showed the revenue of whole villages, but they were seldom for any series of years. And as, while the farming system was in force, the hereditary district officers had lost their importance, few of them had preserved their records. The records of the village accountants were also mutilated, full of falsifications and interpolations, and never trustworthy. [Mr. Chaplin, 20th August 1822, Bom. Gov, Rev. Rec. 68 of 1823, 170-171. Compare East India Papers III. 804 and Lieut. Shortrede, 1st October 1835, Bom. Gov. Rev. Rec. 698 of 1836, 86.]

In 1817-18 the existing Maratha settlement was maintained and deductions were granted for any payments which had been made since the beginning of the year. The settlement was with the village headmen, who, Captain Robertson says imposed upon him and drained the people as much as they could. The people claimed to have Buffered from the war and considerable deductions had to be made on this account, though, except in the tracts of Bajirav's march Captain Robertson believed the people had suffered less than they were accustomed to suffer in years of peace and regular taxation. [Captain Robertson, Collector, 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825, 509. According to Dr. Coats (29th February 1820, Trans. Bom. Lit. Soc.III. 228) the people of Loni village hailed their transfer to the British as a happy event. The abolition of the revenue contracting system, and the liberal remission in consequence of losses by the war, confirmed the high expectations that had been formed of British justice and liberality.]

1818-19.

At the close of the year all balances were remitted. [Captain] Robertson, 10th October 1821, East India Papers IV. 526. In 1818-19 the crops were flourishing and the returns good. On account of the difficulty of collecting detailed village information, Captain Robert-son continued the settlement with the headmen. Dr. Coats writes on the 29th of February 1820 (Trans. Bom. Lit. Soc. III. 273-276) about the revenue settlement of the Loni village on the Ahmadnagar road. These details apply to the whole Poona district. " The revenues are derived from a direct tax on the land, and some extra impositions which must also indirectly come from the same source. The land tax varies from year to year according to the quantity under cultivation. Lands are classed into three kinds and pay a fixed tax according to their quality, agreeably to a rate and measurement made 200 years ago by the Muhammadans; previously to which time the custom seems to have been for the government to have a certain proportion, about half of the produce, or to commute it for money at the market price. The land tax is not increased in favourable. seasons, and in very unfavourable seasons the Government makes a remission Waste and foul lands pay such small rent as may be agreed on between the tenant and the Government agent till they have been brought fully under cultivation, when they become liable to the established tax. Of £130 (Rs. 1300), the amount of the revenue settlement for 1818, £120 (Rs. 1200) were derived from the direct tax on the land and £10 (Rs. 100) from indirect taxes; £24 8s. (Rs. 244) of this amount were granted to defray the expenses of the religious and charitable establishments of Loni, and

various customary charges and presents allowed by the Government, and £20 (Rs. 200) were remitted by the Collector in consequence of the un-favourable season and the poverty of the cultivators. The yearly settlement for the revenue the village is to pay for the ensuing year, takes place a little before the beginning of the rainy season. The patil and kulkarni first assemble all the cultivators, when the lagvad *jhada* or written details of cultivation for the past year are produced, and an agreement made with each of them for the quantity is to cultivate in the approaching season. As the patil's credit with the Govenment depends on the prosperity of his village and the state of cultivation, he endeavours to extend this by all means in his power. The headman will not allow a thalkari or hereditary landholder to throw up lands he had cultivated the year before; and should any part of his thal or estate be waste, he upbraids him and threatens to exact the land tax for it if he does not bring it under cultivation. The headman has less hold on the upri or casual holder who will go where he can get land on the best terms, and is obliged to treat him with great consideration. If from any *cause* the *upri* threatens to throw up his lands, he is privately promised better terms and greater indulgence; or if he is in distress for money he is promised advances or tagai from the Government. When the patil and kulkarni have made these preliminary agreements, they proceed to the Collector, or his agent, and enter into another agreement for the amount of revenue to be paid for the approaching year, subject to remissions on account of asmani and sultani, that is the destroying influence of skies and rulers or the hand of God and the king. The revenues are usually collected by four instalments. The first begins about October, and is termed the tusar patti, in allusion to the name of the crop reaped at this time which consists of rate, mug, udid, maka, sava, and vari. This instalment is in the proportion of one-eighth or one-tenth of the whole revenue. The second takes place in January, and is termed the *kharif* patti or tax, and is the largest instalment, being about one-half of the whole. The third is termed the *rabi patti*, and begins in March; and the fourth, the akar sal patti or a final settlement, usually takes place in May. The following is the process usually observed in realizing the revenues. The native collector or mamlatdar of the division sends an armed messenger with a written order on the patil to pay him an instalment of the revenue, mentioning the amount; on account of a specified crop. The order runs: ' Tah mukadam suk Loni taraf Sandis prant Poona (the Arabic year follows) mauje machkur sal machkur paiki tusar patti baddal Rs.200 gheun huzur yenya kamas sipai pathvila ahe.' (Signed). That is to the headman of Loni village, in the group of Sandis, in the district of Poona, in the Arabic year so and so, of the said village for the said year on account of the first instalment

Rs. 200 to bring to head-quarters a messenger is sent. The *patil* on this sends the beadle or veskar to the house of each cultivator, and summons him to attend at the *chavdi* or village office next morning, and be prepared to pay his proportion of the instalment of the revenue that is due. The headman, village clerk, and messenger go to the office and squat on a cloth on the cowdunged floor and the landholders attend in succession. Some at once pay their share, and take a receipt or pavti from the clerk. Many beg for a few days' respite, seldom more than a week, to enable them to discharge their share. The amount of annual tax paid by any individual in the Loni village is not more than Rs.50, and that of the majority is Rs. 20, so that the sum to be paid at an instalment is often only two or three rupees. The money is paid to the headman who hands it to the village potdar or treasurer to ascertain whether it is good. If it is good the potdar stamps his mark on it, and when the collections of the day are over, he takes it to his house. As soon as the whole instalment has been realized, it is sewed in a leather bag by the shoemaker, Sealed by the headman, and sent by a Mhar, under charge of the messenger, to the mamlatdar. If the patil has not been able to realize the amount of the order on him, he sends all he has collected with an explanatory letter to the mamlatdar, but the messenger does not in this case guit the village till he has been ordered to do so by his employer." There were no complaints of over-assessment. Perhaps the dread of the new Government prevented the headmen from oppressing the people perhaps they took advantage of the change and frightened the people from complaining. Captain Robertson surveyed and measured the Nane Maval. The surveyors were men from Belari in Madras and they were allowed to carry out Sir Thomas Munro's survey rules. But the survey was badly done and showed so enormous an assessment that Captain Robertson did not adopt it.

1819-20.

In October 1819 an attempt was made to introduce a *rayatvar* or individual landholder settlement instead of a *maujevar* that is a village or headman settlement. The change had to be introduced slowly and with caution. In the first season the mistake was made of settling with the people for the customary or *vahivat* rates and not for the full or *kamal* rates, and either the village headmen or the hereditary officers raised large sums from the people in addition to what they paid to Government. In this year the crops were fair, and the price of grain was high about twenty-four pounds the rupee (2¾-3 *paylis*). But an epidemic of cholera, which had broken out in the previous season, proved so fatal that the population was seriously reduced and

cultivation spread but little. [Captain Robertson, Collector, 1st Feb. 1825, Bom. Gov. Rev, Rec. 117 of 1825, 509 - 514, 516-517; 10th October 1821, East India Papers IV. 580. So terrible was this cholera that in one village of 1000 people 460 died. Bom. Gov. Sel. CLI. 254.]

1820-21.

Of the state of the district and of the system of land administration in 1820-21, when the power of the British had been long enough established for their officers to gain a familiar knowledge of the people and of the condition of the district, several reports, chiefly those of Captain Robertson the Collector, have left interesting and fairly complete and clear details. [Captain H. D. Robertson, Collector, 1st May 1820 and 10th October 1821, East India Papers IV. After June 1820, when Indapur and Shivner or Junnar were transferred from Ahmadnagar to Poona, the district stretched (October 1821) about 120 miles from north-west to south-east with an average breadth of about thirty-five miles and an area of about 4200 square miles. The population was about 500,000 or 119 to the square mile, and the yearly revenue was about £100,000 (Rs. 10,00,000), of which about £65,000 (Rs. 6,50,000) belonged to Government and about £35,000 (Rs. 3,50,000) were alienated. [Captain Robertson, 1st May 1820, East India Papers IV. 403; 10th October 1821, East India Papers IV. 524-525. The 1213 villages of which 317½ were alienated, were grouped into nine sub-divisions, Poona City, Bhimthadi, Indapur, Pabal, Khed, Purandhar, Haveli, Maval, and Shivner or Junnar, the last eight yielding an average revenue of £12,500 (Rs. 1,25,000) and under the charge of mamlatdars whose pay varied from £84 to £180 (Rs. 840-Rs. 1800) a year. [East India Papers IV. 525, 526, 585, Ext. Rev. Letter from Bombay, 5th Nov. 1823, East India Papers III. 811. Mr. Elphinstone, 1819, Ed. 1872, 31, and East India Papers IV. 169.] About 700 men were engaged for the protection of the district of whom 192 were cash-paid fort quards or shibandis, 407 were revenue messengers or peons, and 100 were land-paid militia or shetsanadis, [East India Papers, IV. 590.] The country was divided into two chief parts, the sunset or maval, lands in the hilly west from which Shivaji had drawn the flower of his troops, and the eastern plain or desk. [East India Papers, IV. 404.] The western hills were covered with timber and brushwood, and the eastern hills and the whole plain country were bare of trees. [East India Papers, IV. 403; Heber's Narrative, Ed. 1829, III. 114.] Many rivers passed east and south-east from the Sahyildris. Their valleys, which wen known as khores and ners, had rich soil, and, with some exceptions were well peopled and fairly cultivated though there were no watered crops or high tillage.

The stock of fish was by no means plentiful, and few of the fish were good eating. Tigers were found in the west, and all over the district were panthers, hyenas, wolves, and wild hog. The hills yielded little; the supply of teak and poona (Calophyllum elatum) was scanty, and the timber was small. The hill grass in the west was good for horned cattle though not for sheep or for horses, and on the skirts of the eastern hills there was excellent grass both for sheep and for horses. Compared with other parts of India the climate was good, the air was light, the cold bracing, and the heat not oppressive. During 1818-19 numbers had perished in a deadly plague of cholera; but this was unusual; the chief diseases were fever, ague, affections of the liver and bowels, and violent colds. [East India Papers, IV. 404.] Except a few showers from the north-east in November the supply of rain was from the southwest. Within about fifty miles from the Sahyadris the fall of rain was generally sufficient. East of this the supply was scanty and in Supa and Patas great scarcities were frequent. Of the 1213 villages or maujes some were alone and others had hamlets or vadis. Forty to ninety villages formed a group called a tarf or mahal with in each group a market town or kasha. Five to eight village groups formed a division called *subha*, *prant*, or *desh*. The village boundaries were in most cases natural boundaries, the limiting line in hilly districts as a rule carefully following the panlot or watershed. Most of the villages were open. Some had walls of mud and stone and in others the sides and gable ends of the outer houses were so connected as to form a valuable defence, [Extract Revenue Letter from Bombay, 27th November 1822, East India Papers III. 793-794. East India Papers, IV. 408.] There were three chief varieties of soil, black or kali, white or pandhri, and red or tambat. Of the black soil there were three varieties; the first called dombi and kevaldhas, the richest variety but not the most popular because of the large amount of water which it required; the stony called khadkal or dhondal, the most esteemed variety because it wanted comparatively little water, though it required manure and in spite of the husbandman's skill in mixing crops was believed to be losing its power; the third variety of black was when the black was mixed with sand clay or limestone. Of the white or pandhri there were several varieties. Most of it was charged with lime. But the husbandmen liked it as it was a clean soil growing few weeds. The red or copper soil was of several shades. It was generally a poor soil along the skirts of the hills rough and stiff to work and requiring deep ploughing. If well worked it sometimes yielded large crops. The chief varieties were pure red or *nirmal tambdi*, the lightest and richest variety, deeper and sandier than any other; upland or mal jamin thin and with rock near the surface; valsar or sandy fairly rich when tolerably deep; and chopan shedvat or chikni a clayey soil found near

river banks. Of other soils in --swampy lands there was a clayey variety called *shembad* or *upal*. Roughly, of the whole area of arable land perhaps about fifty per cent were black or kali, twelve per cent white or pandhri, thirty per cent red or tambdi, and eight per cent of other soils. Of the fifty per cent of black land about forty yielded dry grains or *jirayat* or were waste; and of the remaining ten, two per cent yielded garden crops, five per cent cold weather or rabi crops watered by channels, and three per cent cold weather crops watered from wells. Of the twelve per cent of white land one per cent yielded garden crops, two per cent cold weather crops watered by channels, two per cent cold weather crops watered from wells, and seven per cent dry crops. [Captain Robertson, 10th October 1821, in East India Papers IV. 565-566. Of the thirty per cent of red land twenty-seven per cent yielded dry crops or were waste. Of the remaining three per cent half a per cent yielded garden crops, one and a half per cent yielded channel Watered cold weather crops, and one per cent well watered cold weather crops. The eight per cent of other soils either yielded drycrops or were not under tillage. According to these returns eighty-two per cent of the arable land yielded dry crops, and eighteen per cent yielded watered crops. Of the watered land ten per cent were black, five white, and three red. Of the eighty-two per cent of dry crop land about forty per cent black, seven per cent white, and seven per cent red, or fifty-four per cent in all, could grow cold weather crops; the remaining twenty-eight per cent grew only early or rainy weather kharif crops. Of these eighty-two per cent of unwatered land only twenty-two per cent were under late crops, about forty per cent were under kharif crops, and about twenty per cent were waste or fallow. Of the arable land of the district about twenty per cent or one-fifth, were waste and eighty per cent or four-fifths were under tillage. Of the eighty per cent under tillage about half were under dry-cropa. Of the remaining forty per cent three and a half were under garden crops, six under well-watered late crops, eight and a half under channel watered late crops, and twenty-two were not watered. Of the forty per cent under early crops thirty-five per cent grew the better dry grains, four per cent grew rice, and one per cent grew hill grains or varkas. [East India Papers, IV. 565-567. By kharif is to be understood crops brought to maturity by the monsoon rains; and by rabi, those that are matured by dews and by irrigation and partial showers in the fair season, from November till March. It is to be remarked that no rice is cultivated by irrigation, all which is sown depending solely on the south-west rains, and a partial and uncertain supply from streams that continue to flow for a fortnight or three weeks after the south-west rains cease. Captain Robertson, 10th October 1821, East India Papers IV. 568.] Of the grains grown in the Poona district seventeen, which were specially

prized by the people, were known as the great gifts or *mahadin*. These were alshi, chavlya, harbhare, hulge, javas, jondhle, kodru, lakh, masur, mug, rice, satu, til, tur, udid, vatane, and wheat. The other products were small grains, ambadi, bajri, bhadli, dhonglya, harik, javas, kathan of sorts, kardai, maka, math, mohrya, nagli, pavte, ranmug, ran, sorti, siras, til, and vari. Besides these there were several wild or self-sown grains, chiefly barbade, devbhat, havri kamal-bij, pakad, til, udid, and varsh-bij. The crops generally grown were on garden land betel leaves, chillies, carrots, garlic ginger, *jvari*, Indian corn, kadval; kothimbir, onions, peas or vatane, radishes, rajgira, rale, satu, sugarcane, sweet-potatoes, tobacco wheat, and yams; on black land ambadi, bajri, gram, hulge, jvari, math, mug, pavte, rale, tobacco, tur, vatane, and wheat; on poor land bairi, bhadli, hulge, math, nagli, sava, til, and vari; on uplands bajri, bhadli, jondhle, nagli, sava, tur, and vari; and on pulse or kathan land, gram, kardai, masur, satu, val, vatane, and wheat. The following is a rough estimate of the quantities of seed required to sow a bigha or about three-fourths of an acre of the different crops: [In the west the land was divided into three classes, varkas or upland, kathan pulse, and bhusar or rice. Captain Robertson, 10th October 1821, East India Papers IV. 572-574.1

POONA CROPS: PAYLIS OF SEED TO THE BIGHA, 1821.

| CROP. | LAND. | | | CROP. | LAND. | | |
|--------------|------------------------|---------|---------|--------|---------|---------|---------|
| | Good. | Middle. | Poor. | CROP. | Good. | Middle. | Poor. |
| | Paylis. | Paylis. | Paylis. | | Paylis. | Paylis. | Paylis. |
| Alshi, javas | 2 | 3 | 41/2 | Mirchi | 5 | 6 | 7 |
| Ambadi | 2 | 3 | 4 | Mug | 5 | 6 | 8 |
| Bajri | 1 | 11/2 | 21/2 | Nagli | 1 | 11/2 | 2 |
| Bhuimug | two <i>mans</i> weight | | | Rale | 1 | 1½ | 21/2 |
| Chavlya | 5 | 6 | 7 | Rice | 36 | 42 | 50 |
| Harbhare | 6 | 7 | 10 | Sava | 1 | 1½ | 2 |
| Hulge | 11/2 | 21/2 | 4 | Shalu | 8 | 10 | 13 |
| Jondhle | 1 | 11/2 | 21/2 | Til | 1 | 11/2 | 2 |
| Kardai | 2 | 21/2 | 21/2 | Tur | 2 | 21/2 | 3 |

| Kodru | 1 | 2 | 21/2 | Udid | 3 | 6 | 7 |
|-------|------|---|------|--------|----|----|------|
| Lakh | 2 | 3 | 4 | Vari | 30 | 32 | 40 |
| Masur | 6 | 8 | 11 | Vatane | 2 | 3 | 31/2 |
| Math | 11/2 | 2 | 21/2 | Wheat | 3 | 6 | 10 |

The result of two experiments on first rate black land made by Captain Robertson on the 31st of October 1820 was to show an average outturn of grain to the English acre worth about £3 (Rs. 30), the outturn being turned into money on the basis of about forty pounds of millet (5 paylis) to the rupee. The trials on which this estimate was based were: In Talegaon Dhamdhere in one pand or one-twentieth of a bigha of the field called Gokal which had the best soil and yielded the best crop of the year (a middling year), 9/10 the of the crop were bajri and 1/10th *ivari*. It yielded 5½ paylis, that is 110 paylis worth Rs. 22 to the bigha. The second trial was in the village of Tankli in the field of one Tulaji Kale, in one-twentieth of a bigha of the best black land of a middling crop of spiked millet or bairi mixed with other grains. The bajri yielded 31/8 paylis that is at the rate of 621/2 paylis the bigha, worth Rs. 12½, and the other products worth Rs. 14 as. 15 or a total value of Rs. 27 as. 7 East India Papers, IV. 568. Estimates of the best black land in three good and three bad years gave a mean bigha outturn of 103 paylis or about 824 pounds worth £2 4s. (Rs. 22). [East India Papers, IV. 569, The details are:

Poona Crops: Best Unwatered Black Land, 1820.

| CROPS. | Best. | Middle | Worst | Total. | Average. | Value. |
|---------|---------|---------|---------|---------|----------|--------|
| | Paylis. | Paylis. | Paylis. | Paylis. | Paylis. | Rs. |
| Bajri . | 65 | 57 | 35 | 157 | 52 | |
| Tur | 30 | 26 | 12 | 68 | 22 | |
| Til | 25 | 18 | 8 | 51 | 17 | |
| Rale | 20 | 14 | 10 | 44 | 14 | |
| Ambadi | 5 | 3 | 2 | 10 | 3 | |
| Total | 145 | 118 | 67 | 330 | 110 | 26 |
| Bajri | 120 | 100 | 70 | 290 | 97 | |
| Jvari | 6 | 4 | 3 | 13 | 4 | |

| Total | 126 | 104 | 73 | 303 | 101 | 20 |
|--------|-----|-----|----|-----|-----|----|
| Bajri | 50 | 40 | 28 | 118 | 39 | |
| Tur | 60 | 45 | 28 | 133 | 44 | |
| Til | 20 | 15 | 10 | 45 | 15 | |
| Ambadi | 4 | 3 | 2 | 9 | 3 | |
| Total | 134 | 103 | 68 | 305 | 102 | 25 |

continued

| CROPS. | Best | Middle | Worst | Total. | Average. | Value. |
|-------------------|---------|---------|---------|--------|----------|--------|
| | Paylis. | Paylis. | Paylis. | Paylis | Paylis. | Rs. |
| Bajri | 70 | 60 | 45 | 175 | 58 | |
| Math | 60 | 50 | 40 | 150 | 60 | |
| Total | 130 | 110 | 85 | 325 | 108 | 20 |
| Pivla Jondhala | 130 | 108 | 80 | 318 | 106 | 20 |
| Wheat | 100 | 80 | 60 | 240 | 80 | 20 |
| Gram | 130 | 115 | 90 | 335 | 112 | 22 |
| Total | 895 | 738 | 523 | 2166 | 719 | 152 |
| Average | 128 | 105 | 75 | 308 | 103 | 22 |

]

From this, Captain Robertson thought that to give a fair return for a series of years, one-fourth should be taken to represent the failure of crops on account of want of rain. The mean *bigha* outturn would then be about 616 pounds (77 *paylis*) worth £1 12s. (Rs. 16). [East India Papers, IV. 669-570.] To this should be added about 56 pounds (7 *paylis*) worth 3s. (Rs. $1\frac{1}{2}$) for a second crop or a total mean outturn of about 672 pounds (84 *paylis*) worth £1 15s. (Rs. $17\frac{1}{2}$). Experiments and estimates seemed to show that the mean outturn of second clan land was about one-third less than the mean outturn of the best land that is about 448 pounds (56 *paylis*) worth about £1 3s. $4\frac{1}{4}$ d, (Rs. 11 as. 10 5/6). Similar estimates gave for the poorest lands an outturn of about five-sevenths less that is of about 192 pounds (24 *paylis*) worth

about 6s. $4\frac{3}{4}d$. (Rs.3 as. $3\frac{1}{6}$). That is for the three leading classes of land an average outturn of about 437\% pounds (54\% paylis) worth about £1 1s.7d. (Rs.10 as. $12\frac{2}{3}$). [That is about 520 pounds (65) paylis) worth Rs. 12 as. 934 the acre. East India Papers, IV. 570. According to Captain Robertson (10th October 1821 East India Papers, IV. 570) 2% pints are equal to one measured sher. The equivalents of paylis in the text are given at two pounds the sher or eight pounds the payli. The rates in force in the greater part of the district under the Maratha or kamal settlement were, except in the western rice lands or about twenty-two per cent of the whole, a bigha of dry land fit to yield vegetables or jirayat malai, 6s. (Rs. 3); a bigha of pulse or kathan land 4s. (Rs. 2); a bigha of second class land 3s. (Rs. 1½); a bigha of third class land 2s. (Re. 1); and a bigha of fourth class land 1s. 6d. (12 as.), that is an average of about 3s. 3%d. (Re.1 as. 10 5/2) that is equal to about one-sixth of the average outturn. [East India Papers, IV. 570. As regards watered land Captain Robertson's estimates of outturn were for unhusked wheat on a bigha of black soil of the first sort about 1728 pounds (216 paylis), of the second sort about 1344 pounds (168 paylis), and of the third sort about 1264 pounds (158 paylis). This gives for the three sorts an average of about 1440 pounds (180 paylis) the bigha that is about 1728 pounds (216 paylis) the acre. [Captain Robertson estimates this acre outturn of 216 paylis or 864 shers equal to 32 English standard bushels, and notices (10th Oct. 1821) that the poorest land in Scotland yields of oats from one bole and a quarter to one bole and a half or from five to six bushels to the English acre; the average barley produce to the acre on middling land in Scotland is twenty bushels; the average of wheat is twenty-four bushels. In Yorkshire the average of oats is fifty-eight bushels. Barley in the mid-land district of Gloucester yields sometimes sixty bushels but the average is thirty-four bushels; in the vale of Gloucester a farmer in 1784 averaged from fifty acres no less than forty-five bushels to the acre of wheat but this was considered a very superior crop. East India Papers, IV. 571. The current assessment on a bigha yielding this produce was 8s. (Rs. 4) if it was watered from a channel, and 12s. (Rs. 6) if it was watered from a well Captain Robertson's experiments in rice lands gave a bigha outturn of about 1806 pounds (1 khandi and 1½ mans or 225¾ paylis) for a good crop, about 1281 pounds (15 ¼ mans or 160% paylis) for a middle crop, and about 777 pounds (9 ¼ mans or 97½ paylis) for a poor crop, that is an average of about 1288 pounds (151/8 mans) equal to 161 paylis the bigha or 207 paylis that is 30¾ English bushels the acre. The season of 1820 when the experiments were made was a poor rice year and a more correct average was said to be 20 mans the bigha or 87 bushels the acre. [East India Papers, IV. 571-572.]

As regards the style of tillage Captain Robertson noticed that land was not ploughed oftener than once in three or four years. In the other years harrowing was considered enough. But this harrowing was laborious as to destroy the weeds it had to be repeated four times, each time in an opposite direction. [East India Papers, IV. 578.] As regards the cost of tillage Captain Robertson's inquiries showed that a set of eight bullocks could till about 26 acres (35 bighas) of good bad and indifferent land, and about 19 acres (25 bighas) of good land. A bullock cost on an average £1 16s. (Rs. 18) and lasted ten years, that is the team of eight bullocks represented an average yearly charge of £1 9s. (Rs. 14½). The cattle were fed on grass and straw which cost almost nothing, and a few sugarcakes costing for the eight bullocks about 4s. (Rs. 2) a year. To work the eight bullocks four men were wanted who, if all four were hired, would cost £18 4s. (Rs. 184). The details are: Food, 2880 pounds or 360 paylis of millet or nagli at 40 pounds (5 Paylis) the rupee, £7 4s. (Rs. 72); cash at £2 (Rs. 20) each for three men and £2 4s. (Rs. 22) for the fourth or a total of £8 4s. (Rs. 82); clothes for the four men £3 (Rs. 30). Total £18 8s. (Rs. 184). East India Papers, IV. 576. Other yearly expenses for field tools would amount to an average of about 16s. (Rs. 8). The details are: Every year, for the plough ropes 5s. (Rs. 2½) and ankda 3s. (Rs. 1½) or in all 8s. (Rs.4); every five years, a phal 3s. (Rs.11/2), a halas 5s. (Rs.2½), a yoke or ju 5s. (Rs. 2½), shilvat or shilvati 4s. (Rs. 2), kulav 4s. (Rs. 2), panshes (?) 5s. (Rs.2½), Pabhar or pabhar 6s. (Rs. 3), panle (?) 3s. (Rs. 1½), sindris (?) 6s. (Rs. 3), total £2 1s. (Rs. 20½) in five years or 8s. (Rs. 4) every year. Total for dead stock 16s. (Rs. 8) a year. East India Papers, IV. 576. The average cost of seed on about 26 acres or 35 bighas at about eight pounds the acre (3 shers the bigha) represented £1 1s. (Rs. 10½). That is a total yearly outlay of about £22 (Rs. 219). To this cost of tillage were to be added the rent and other charges on the 26 acres (35 bighas) of land. These at £5 15s. 6d. (Rs. 57¾) for the assessment, 13s. (Rs. 6½) for extra cesses, and £7 (Rs. 70) for the claims of district and village officers and servants, amounted to about £13 (Rs. 1341/4). That is for 26 acres (35) bighas) of good middle and bad land a total expenditure of about £35 (Rs. 353¼). The average produce of the 26 acres (35 bighas) was about $437\frac{1}{3}$ pounds $(54\frac{2}{3} paylis)$ worth £1 1s. 7d. (Rs. 10 as. $12\frac{2}{3}$) the bigha representing a value of £37 15s. 5d. (Rs. 377 as. 11\%), and this, after deducting the £35 (Rs. 353¼) of charges, left a balance of £2 8s. 11d. (Rs. 24 as. 7¹/₃). [Capt. Robertson in East India Papers, IV. 576.] If instead of hiring the four men two of the men, as was the case in most families, belonged to the household, though the cost of food and clothes would remain the same or might slightly rise, £4 (Rs. 40) would be saved in wages. If, instead of being bought, the bullocks

were reared at home, the yearly outlay on bullocks might be-reduced about 7s. (Rs. 3½), and the wife and children, from the sale of milk butter and cowdung-cakes, might make £3 (Rs. 30) a year. These three items together amounted to £7 7s. (Rs. 73½) which with the balance of £2 8s. 11d. (Rs. 24 as. 71/3) of receipts over expenditure amounted to a total of £9 15s. 11d. (Rs. 97 as. 151/2). In the best land, according to Captain Robertson's calculations the balance of receipts over charges in regular tillage would be £9 5s. (Rs. 92½) instead of £2 8s. 11d. (Rs. 24 as. $7\frac{1}{3}$), that is, together with the £7 7s. (Rs. 73½) savings from the home work of the men and the extra earnings of the women and children, a total profit of £16 12s. (Rs. 166). [The details of the charges and receipts of about 19 acres (25) bighas) of the best land are: Cost of tillage as for poorer land Rs, 219, Government assessment at Rs. 2 a bigha Rs. 50, extra cesses Rs. 6, allowances and village servants' shares Rs.70; total Rs. 345. Under receipts, 25 bighds at 84 paylis worth Rs. 17½ a bigha give Rs. 437½ that is a balance of Rs. 921/2. East India Papers, IV.. 577. On the basis that the father and son worked instead of two of the hired men this estimate of cost of tillage, rent, and other charges, and value of produce showed that in good lands the Government share of the outturn was 13 per cent and the landholder's share 87 per cent. Out of the landholder's 87 per cent 16 per cent went to claimants and village servants, 29 per cent represented the cost of tillage, and 42 per cent the balance left for the support of the family which generally contained six members. In average lands the Government share was 17 per cent and the landholder's share 83 per cent. Out of the landholder's 83 per cent 18 per cent went to village servants and other claimants, 34 per cent represented the cost of tillage, and 31 per cent the maintenance of the landholder's family. [East India Papers, IV. 578.] In Captain Robertson's opinion these results showed that Government took from the landholder guite as large a share of the produce as it could safely take. Regarding the cost and profit of rice tillage Captain Robertson gave the following estimates. Only two bullocks were required for one plough. A man and his family might live on the produce of one plough but they would be wretchedly poor. A pair of bullocks could plough about 4 acres. (5 bighas) of rice and about 1½ acres (2 bighas) of nachni and sava. The best way of growing rice was by planting the seedlings. This was laborious and costly. It would take fifty men one day to plant the seedlings of one man of seed, or 150 men for one day to plant 4 acres (5 bighas). Labourers called in to plant for one day's work were paid about eight pounds (1 payli) of rice and a cake of some other grain. The planting of rice, where each handful of seedlings had to be separately pressed into the ground, was much more troublesome than the planting of *nachni* and *vari* whose seedlings were

thrown down at intervals and left to take root. Ten men could plant as large an area of nachni or vari as 150 men could plant of rice. [East India Papers, IV. 578, 579. At the rice harvest a man and his wife could cut four acres (5 bighas) in eight or nine days. But there was always special expenditure as the grain had to be carried and stacked before it got too dry, and several men were generally hired and paid about eight pounds (1 payli) of rice for a day's work. In growing nachni, or vari except at harvest, little outside help was wanted. Sava had to be weeded when the grain was about a foot high. The weeding was carried out by the mutual agreement of the villagers with no other cost except a small outlay on liquor. As they worked in the chilly rain very lightly clad, it was hard work to keep the weeders in spirits. They were generally given as much liquor as they could drink and had a drummer behind them who kept drumming and every now and then shouted Bhalere dada bhale bhai dada, or Well done brothers well done. [East India Papers, IV. 578-579.]

There were few masonry watercourses in Poona. What there were had been built by the Moghals and were cleaned and repaired by Government. Six of the sub-divisions had no regular dams and no watering lakes or reservoirs. If a stream passed near his fields a landholder occasionally made a temporary dam and dug a channel. But it was neither according to rule nor according to practice to make the whole members of a village undertake such works. In villages which had an old water-work, the people might give their labour to repair it; but even this was not a condition of their tenure. Since the English had conquered the country no new reservoirs or watercourses had been made. [East India Papers, IV. 526.]

Condition, 1821.

The greater part of the people were Kunbis or cultivators. [East India Papers, III. 793.] Their number had probably not increased during the three years of British rule. A good many of Bajirav's servants and messengers had come and settled in their villages. But the cholera had perhaps swept away more than had come back; and a good many, tempted by low leases, were leaving Indapur (October 1821) and settling in the Nizam's country. [East India Papers, IV. 592.] After a succession of years of good or fair harvests and high prices the state of the husbandmen was by no means wretched. Still they were generally small, poor, and badly clothed. The people of the eastern plain as a rule were abler bodied and better looking than those of the west. This was said to be because the eastern people lived on millet, and the western people on rice *ragi* and *sava*. Few husbandmen in any

part of the district ate wheat; what wheat they grew went to the nearest market town. [East India Papers, III. 793; East India Papers, IV. 404.] All ate flesh and drank liquor. But they were not drunken, and drunkenness was very rarely a cause of crime. [Capt. Robertson, 10th Oct. 1821, East India Papers IV. 592; Extract Rev. Letter from Bombay 27th Nov. 1822, East India Papers III. 793. Though as a whole the husbandmen might be described as badly clothed, the people of the west were much worse clothed than the people near Poona. In the west they had little but a blanket and a scanty cloth round the middle while near Poona the men had generally a very good pair of cotton breeches. [East India Papers, IV. 404.] In the west rents were high, the claims of village servants and others were heavy, and the people were poor. [East India Papers, IV. 592,] In the east the houses were of mud and stone with flat mud roofs; in the west they were smaller and were covered with thatch. [East India Papers, III. 794; East India Papers, IV. 408. The usual yearly rate of interest was (October 1821) twelve per cent; but 18¾ per cent a year (¼ a. a month for a rupee) was common, and in the west twenty and twentyfour per cent were paid. When the interest was paid in grain about 75 per cent (a sher a rupee a month) was taken. If grain was borrowed for food, one guarter to three guarters more than the guantity borrowed had to be repaid; find if grain was borrowed for seed, double the quantity borrowed had to be repaid. It had been and it still was usual for the husbandman to make a bargain with a grain dealer to advance him the price of his crop before the crop was cut, and he paid his rent by on order or havala on the grain dealer to whom he had made over his crop. In this the husbandman suffered as he was generally pressed for money and the grain dealer held back till he was able to buy at something less than the market value of the grain. [East India Papers, IV. 580. Though as a class the villagers were frugal and provident, owing to the oppression of the revenue farmers many were deeply in debt. These debts were of long standing and were often made of compound interest and occasional aids. Such debts could in fairness be settled only by a compromise which could rarely be obtained except through a jury or panchait. [Mr. Chaplin, 20th August 1822, East India Papers IV. 514.]

Slavery, 1820.

Under the landholding class at the beginning of British rule was a class of slaves. Dr. Coats (Feb. 1820) found in the village of Loni eight families of slaves, comprising eighteen persons. In reward for good services one of the slave families had virtually received their freedom lived in a separate house, and tilled on their own account. The others

lived in their masters houses. The slaves were well treated. They were clad and fed and except that they took their meals apart, were treated in the same way as the members of the family. If they behaved well they got pocket money on holidays, and their masters were at the expense of their marriages which cost £5 or £6 (Rs. 50 or 60). The men worked in the fields; the women helped their mistresses; and when unmarried were sometimes their masters' concubines. The present race were all home-born. Some of them were descended from women brought as prisoners from Hindustan and the Karnatak. Freedom was sometimes given to slaves from religious motives, for good conduct, and sometimes because they became burdensome Such persons took the name of shinda or bastard and were considered inferior and were avoided in marriage. Slave-dealing was thought disreputable, and was not much practised. Boys were rarely brought to market; sales of girls were commoner. Beautiful girls were bought by the rich as mistresses, or by courtezans to be taught dancing and singing and fetched £10 to £50 (Rs. 100-500). The less favoured were bought as servants in Brahmans' families. [Trans. Bom. Lit. Soc. III. 239 - 240. Regarding the condition of the people at the beginning of British rule the authorities do not altogether agree. In his paper (Trans. Bom. Lit. Soc. III. 225-228) Dr. Coats described (29th Feb. 1820) the condition of the people of Loni as extremely deplorable. Their houses were crowded, and not sufficiently ventilated; and their cattle and families were often under the same roof. Their food, although seldom deficient in quantity, was not always wholesome and nutritious; and they were wretchedly clothed Though exercise and water-drinking generally made them wear well, the constant labour of their women out of *doors* unfitted them for nursing, and in consequence a large proportion of their children died in infancy. The heavy exactions imposed on them by the Government kept them poor, and did away every prospect of independence or improvement. They were improvident, and seldom troubled themselves with the future. The township of Loni contained eighty-four families of landholders all of whom, excepting fifteen or six-teen, were more or less in debt to moneyed men in the neighbourhood, generally to Brahmans or shopkeepers. The total indebtedness amounted to £1453 (Rs. 14,530), and besides this the community owed £307 (Rs. 3070). The usual rate of interest was twenty-four per cent a year, but when small sums were borrowed, the interest was often as high as ½ anna per rupee a month or about forty per cent. The indebtedness of individual landholders varied from £4 to £20 (Rs. 40-200) and two or three were over £200 (Rs. 2000) in debt. These debts had generally been contracted to meet marriage expenses, or to buy cattle and food. Each debtor kept a running account with his creditor, and took a receipt for sums he

might from time to time pay, while the interest was brought against him till it equalled the principal, where it ought legally to stop; dam dusar kan tisar or for money double for grain treble, was the maxim that guided juries in settling these debts. Few of those in debt knew anything about their accounts. It was a common opinion among them that they had discharged all just demands on them over and over again. As none of them knew anything of accounts this was possibly not without truth. Besides owing money, about a fourth of the villagers were indebted to their neighbours for grain and straw borrowed to support themselves and their cattle till the next harvest. This they were bound to repay in kind, and with never less than an increase of fifty and often of seventy-five per cent. The whole of the landholder's crop was generally mortgaged before it was reaped. This was the case in ordinary times. In bad seasons or in case of any calamity the evil was much increased. If any of their cattle died they had no means of replacing them but on the terms above explained; and if they failed in this, their only resource was to guit their fields for a time and endeavour to save a little money ' by becoming servants to Brahmans and others, or perhaps by enlisting as soldiers.]

TENURES, 1821.

In 1821, according to Captain Robertson, there were eight leading and many subordinate tenures. [Capt. Robertson, Collector, 10th Oct. 1821, East India Papers IV. 543-547] These were sosti or full rent, kauli or lease, ukti or short rent, dumala or service granted, inamati or rent alienated, sheri or Government held, pal or sut that is rentfree, and gahan or mortgaged.

Sosti.

SOSTI included land which paid Government a full rental. It was of two kinds, *mirasi* or hereditary and *gatkul mirasi* when the hereditary holder was absent. Land held by a *mirasdar* was considered to be the holder's property; he could either sell it or mortgage it. *Oatkul miras* was land whose hereditary holder had disappeared, and which the headman might let on the best terms he could secure and was not bound to pay Government more than the original holder would have paid had he remained. Land of this kind was considered to belong to the village community and by the village was saleable and assignable in mortgage to defray public debts and public expenses. Under the British system the headman ceased to have power to dispose of this class of land.

Kauli.

KAULI or leasehold included land let for a series of years at an increasing specified assessment. If on the last year of the lease the full rental was paid, leasehold land came to be ranked with full rent or sosti land. It belonged to the village community and was saleable and assignable by it. Under the Marathas leases were granted by the village headmen; under the British the power of granting leases was directed and controlled by the mamlatdars.

Ukti.

UKTI or short rate tenure included all land held on something less than a full rental. It was of two kinds, *ukti* or *makta gatkul mirasi* and *khand makta mirasi*. *Makta gatkul mirasi* was hereditary land whose holder had disappeared and which for some short specified time was let to some one else at a rental short of the full amount; it belonged to and was saleable by the village community; *khand makta mirasi* was similar land let under similar circumstances but on a permanent agreement. This land was saleable and assignable in mortgage by the holder. This which was more favourable than the ordinary hereditary tenure was extremely rare.

Dumala.

DUMALA, literally two-ownered land, in the sense that the original owner had not entirely parted with it, was land held for service. It included *shetsanadi* land held for military service as garrison troops; *bakshis* or gift-land, generally garden land granted to a man for his life and then recalled; and *saranjam* land held rent-free at the pleasure of Government without any stipulation of service. *Gaon nisbat dumala*, or two-ownered village-land was village land granted rent-free to a Ramoshi or watchman who could neither sell nor mortgage it.

Inamati.

INAMATI or rent-alienated land was land granted in perpetuity, through favour, in charity, or to an hereditary office-holder, It included sanad inamati or deed-rent-alienated and gaon nisbat inamati or village-rent-alienated. Sanad inamati had four varieties. All of them were liable to pay the duos of village and district claimants or hakdart and all of them originated from the ruling power. Sanad inamati land was held in perpetuity by a deed or sanad from the ruling power, free of all Government exactions. A grant of this kind seemed to have been

always made from ownerless and fallow land. The right assumed by Government to grant such land was not disputed by the village corporation. The other three varieties of deed-held land were inam nimai which paid a Government rent equal to one-half of the full rent, inam tijai, which paid a one-third Government rent, and inam chauthai which paid a one-fourth Government rent. Gaon nisbat inamati was of seven varieties, the headman's land pasodi, the Mhar's land of two kinds hinki and hadola, temple laud or devasthan, craftsmen's land or vaveli, charity land or dharmadaya, and ordeal land or dev teki. Of these, two paid the claimants' dues and one made some payment to Government. Graints of this class were made by the village corporation, but Government appeared to have the power to order an assignment in indm undder this bead. The headman's grant or pasodi, which perhaps originally meant a grant for clothes, was saleable and assignable in mortgage with or without the office of headman. It was free from all charges except the claims of village servants or balutas. The grant to Mhars known as hadki or hinki was a plot of land set apart by the Mhars for carcasses and bones except a fringe round the edge which they tilled; it paid no rent or other charge. The other Mhar grant known as hadola or the bone-land was instead of cash payments. It was saleable and assignable in mortgage and was free from all claims. Temple or devasthan land was assigned for the village gods and for mosques. This land was in charge of the ministrant at the village temple, who was generally of the Gurav caste. He sold the produce and set apart the price to meet the daily charges for the god's red paint, clothes, food, oil, and vessels. It was neither transferable nor saleable. In the west of the district a grant of land to the village craftsmen or balutas, who were known as vavelikars, took the place of a share of the produce. Charity land or dharma-daya was land given in charity or instead of a money payment. It was assignable in mortgage and saleable by the holders. It paid no tax or fee. Ordeal land or dev teki the last of the village grants was land held by a headman or Mhar in return for having gained for the village some disputed land by passing an ordeal. It was saleable and assignable in mortgage.

Sheri.

SHERI was at the disposal of Government and was managed by the Government direct, not through the headman or any of the village agents. It was entirely Government property and paid no fee.

Pal or Sut.

PAL or SUT land was a small plot of rent-free land in a large holding, which was thrown in to make up for some disadvantage under which the holding suffered.

Gahan.

GAHAN. The last special tenure was land held in mortgage or *gahan*. There were six forms of mortgage: (1) The mortgager handed the land to the mortgagee and continued to pay the Government demand and at the end of a certain term the whole debt was cancelled; (2) the mortgagee paid the Government rent; (3) the mortgagee took the produce of the estate as interest and the principal had to be separately paid; (4) the mortgager managed the land and paid the mortgagee a share of the produce; (5) if the mortgager failed to pay within a certain time, the land passed to the mortgagee; (6) the mortgagee paid the rent on condition that if the mortgager did not pay the principal within a certain period he must sell the land to the mortgagee at a fixed price.

Palnuk.

PALNUK. Besides those noticed by Captain Robertson there was a local tenure in the Mulshi petty division formerly of Maval now of Haveli. This was styled palnuk Though Capt. Robertson does not mention palnuk, the following passage in his report (10th Oct. 1821) seems to refer to this tenure. 'In twelve or fourteen villages of the Paud Khore certain Brahmans do not pay the full assessment.' He thought this privlege had been acquired because they were rich and respectable, and not from their being poor. East India Papers, IV. 580.] or rentexemption and resembled the pandharpesha or leading villager tenure of the North Konkan. Under the *palnuk* tenure freedom from village charges and other claims were granted to hereditary district officers Brahmans and others specially mentioned. In some cases this *palnuk* or reduction in rent amounted to as much as sixty-one per cent and in no case was the remission less than eighteen per cent. [Poona Collector's Compilation of 1853, 47, 388. In 1830, September 6th, when he was introducing his settlement into the Mavals, Mr. Pringle noticed that in some villages, chiefly in the Paud vale, Brahmans, village officers, and certain others were free from extra cesses, villagers' claims, village expenses, and other charges. The tenure was called palnuk or freedom from cesses and was like the leading villager or pandharpesha settlement in the North Konkan. Though the privilege was not supported by distinct grants, Mr. Pringle was satisfied that it had long been enjoyed and had been admitted by the Maratha

government. Mr. Pringle thought that the privilege should be confined to those who were in actual enjoyment of it. He accordingly prepared a register which showed that 196 privileged holders enjoyed a concession representing a yearly sum of £351 (Rs. 3510). The reduction on the survey assessment of each of these privileged holders was effected by calculating the value of the cesses or babs from the payment of which each was exempt. The sum thus found was deducted from the regular assessment by a percentage rate equivalent to its amount. From this information a statement was prepared, giving the name's of the *palnukdars* and the reduction to which each was entitled. This arrangement remained in force till 1854. The only change in the interval was that by transfer of the land or the failure of the family of the original holders the amount of the concession had fallen from £351 to £319 (Rs. 3510-3190). [Bom. Gov. Sel. LXX. 11 -12. Under a circular of the Revenue Commissioner N. D., 963 of 8th August 1844, it was decided that the concession ceased with the death of the original palnukdar. This circular was modified three years after by Gov. Letter 2698 of 14th July 1847, which declared that the transfer of land by lineal descent did not affect the concession, Revenue Circular Orders Book, 1860, 415.]

In proposing the Maval survey settlement in January 1854 Captain Francis the Survey Superintendent thought it advisable to make a temporary concession to the palnukdadrs like the concession proposed for the Konkan pandharpeshas. He thought Mr. Pringle's statement of the enjoyers of the *palnuk* concession should be adopted as the basis of the settlement. That if the new survey rates proved not higher than the existing concession rates the new rates should be levied. That where the new survey rates proved higher than the existing concession rates, if the holder was the same person who had held in Mr. Pringle's time, the enhanced rates should not be levied for ten years; and, if the holder was the lineal descendant of the person who had held in Mr. Pringle's time, the enhanced rates should not be levied for five years. In cases where the holder had acquired the land in any way except by descent the new enhaned survey rates should be at once introduced. Captain Francis suggested that a statement should be prepared to show to what remissions the different holders would be entitled till the proposed concessions came to an end. [Born. Gov. Sel LXX. 13-15. The demi-official letter from the Chief Secretary, on the authority of which Captain Francis introduced. the proposed settlement into Maval in 1853-54, seems to have taken no notice of Captain Francis' proposals regarding the palnuk concessions. The matter was brought to the notice of Government in February 1855. In August 1855 Government decided that the question should be reserved for a

future occasion. [Bom. Gov. Sel. LXX. 55, 63, 65.] At present (1884) there are palnukdars in fifty-six villages. Before 1854 the assessment according to mamul rates amounted to £318 (Rs. 3180) and the palnuk to £136 (Rs. 1360). Under the survey introduced in 1854 the assessment on palnuk lands was reduced to £273 (Rs. 2730) and the amount of palnuk to £95 (Rs. 950) This represents the sum now (1884) actually recovered from the palnukdars. It will thus be seen that the palnuk levied under the mamul rates was 6¾ annas in the rupee or 42 per cent, whereas that recovered under the survey rates amounts to 51/2 annas in the rupee or 34 per cent. So that the concession now allowed is more favourable than that under the mamul rates. There is an occasional lapse from failure of lineal descendants or in consequence of the Hue of the land to an outsider and the transfer thereof to the purchaser's khata. [Collector of Poona, 612 of 26th] January 1884. Government have lately (1881-82) decided that mortgage with or without possession does not amount to such a transfer of the privileged land as destroys the holder's right to the usual remission. At the same time the former opinion seems to be upheld that the privilege ceases on any portion of the land which passes from the holder's name except by lineal succession. [Gov. Res. 6414, dated the 28th of October 1881, and 4C8 of 19th January 1882.]

Landholders, 1821.

At the beginning of British rule the main division of the Poona husbandmen was into hereditary holders called *thalkaris* or *mirasdars* and casual holders called *upris*. Among the hereditary holders Captain Robertson thought there were some whose families dated from pre-Musalman times when they used to hold from a Hindu chief on Manu's rental of one-sixth of the produce. [East India Papers, IV. 529.] The hereditary tenure remained in all villages in the district except in about thirty villages which had never recovered from some great calamity. [Captain Robertson, 10th October 1821, East India Papers IV. 579.] Besides the freedom from the chance of being ousted the hereditary holder had many advantages over the *upri* or casual holder. In the west the hereditary holder was free from several cesses. He could build and sell a house; he had a voice in the village councils; and he had a share in the village grazing land. In the east in addition to these advantages the hereditary holder and his wife had precedence in village ceremonies and his children made better marriages than the children of casual holders. [Ext. Rev. Let. from Bombay, 5th November 1823, East India Papers III. 809. In 1821 of about 30,600 landholders who paid direct to Government, about 19,700 were hereditary holders

and about 10,900 were casual holders, that is there were about twice as many hereditary holders as casual holders. As regards the proportion of hereditary holders in different parts of the district, Poona City came first with thirteen to one, Haveli and Shivner came second and third each with five to one, Pabal was fourth with four to one, Khed was fifth with five to three, Purandhar was sixth with three to two, Maval was seventh With ten to seven, Bhimthadi was eighth with nine to ten, and Indapur was last with one to three. [East India Papers. IV. 585. The details are:

Poona Landholders, 1821.

| SUB-DIVISIONS. | Upris. | Mirasdari. | Total. | PROPORTION. | |
|-----------------------|--------|------------|--------|-------------|------------|
| | | | | Upris. | Mirasdars. |
| Bhimthadi | 1185 | 1104 | 2289 | 10 | 9 |
| Poona City | 9 | 115 | 124 | 1 | 13 |
| Indapur | 2509 | 810 | 3319 | 3 | 1 |
| Pabal | 683 | 2504 | 3187 | 1 | 4 |
| Khed | 1805 | 3073 | 4878 | 3 | 5 |
| Purandhar | 1431 | 2160 | 3591 | 2 | 3 |
| Haveli | 588 | 2656 | 3244 | 1 | 5 |
| Maval | 1829 | 2676 | 4505 | 7 | 10 |
| Junnar (Estimated) | 869 | 4600 | 5469 | 1 | 5 |
| Total | 10,908 | 19,698 | 30,606 | 1 | 2 |

Villages 1821.

All landholders were members of village communities which formed the most important feature of Deccan society. The Poona village communities were miniature states with an organization almost complete enough to protect the members if all other Government was withdrawn. They were an excellent remedy for the imperfections of a bad Government; they prevented the evil effects of its negligence and weakness and even presented some barrier against its tyranny and rapacity. Each village had a portion of ground attached to it which was committed to the management of the villagers. The boundaries were

carefully marked and jealously guarded. The village lands were divided into fields each of which, whether tilled or waste, had a name and well known limits. Except a few traders and craftsmen the villagers were almost all husbandmen. Over each village was a headman or padtil with an assistant or chaughula and a clerk called kulkarni and twelve subordinate servants called bara balutas. [Mr. Elphinstone, 1819, Dr. Coats writing in 1820 (29th February) says, 'The township of Loni has its own officers, is governed by its own laws and usages, and is in a great measure independent of all without. Its boundaries and institutions have undergone no alteration from time immemorial; while the great political changes that have been continually going on in the succession of the states it has been subject to, have neither given it much disturbance nor excited much interest. Almost its only intercourse with the Government is the payment of its taxes. Its members are connected with those of the neighbouring townships by intermarriages, and a friendly intercourse is kept up between them. It is commonly left to protect itself from external enemies, and is held responsible for the police within its limits, The officers of the township are two patils who are its civil magistrates; the chaughula or deputy patil; the kulkarni or secretary and accountant; and the bara balutas are its twelve subordinate servants.' Trans. Bom. Lit. Soc. III. 194-195, Ed. 1877.]

Headman, 1820.

The headman or patil [Dr. Coats' account of the Loni village (29th February 1820) in Trans. Bom. Lit. Soc. III. 195-196. held his office direct from Government under a written paper or vatan patra, which specified his duties, his rank, and the ceremonies of respect to which he was entitled; and his perquisites, and the quantity of freehold land allotted to him as wages. In 1820 the patils about Poona, generally said they held their *patilship* from the emperor of Delhi, or from one of the Satara Rajas; in Dr. Coats' opinion many were held from the Peshwas, an origin which was not acknowledged because the Delhi and Satara grants were considered more sacred. The vatan patra was sealed with the sovereign's seal, had the signature of several witnesses to it, and ended with a curse on any one who should disturb or dispute the rights of the holder. The patilship was hereditary and saleable; but the office was looked on as so respectable, and the property attached to it was considered so permanent, that there were few or no instances of its being wholly sold, although, as a means of averting misfortune, part of it had often been transferred by sale. This was the reason why there were two patils in many villages, and three or four in some. When there were more than one headman the duties

and rights of the office were divided, according as it might be stipulated in the deed of sale; the original patil always kept the precedence. The prominent duties of the patil were, along with the village accountant, to ascertain and collect the Government dues from the landholders, and to see they were paid to the persons authorised to receive them; to encourage people to settle in his Tillage; to let out waste lands, and promote agriculture by every meaas in his power; and to punish offences, redress wrongs, and settle disputes among the villagers. In matters of a trifling nature he decided himself, and punished the offender by stripes or reproof, but was not allowed to fine. In cases of more importance he called a panchait or council. Serious, particularly criminal, cases were referred to the mamlatdar or the Government. The patil was also responsible for the police of his township. For neglect of duty the patil was punished by the Government by fine and imprisonment; but, unless for treason or other serious crime, ho was seldom deprived of his office. The patil had great power and influence, and did not always make good use of his power. He was sometimes said, in collusion with the kulkarni, to impose on the landholders in the settlement of their accounts, and with the kamavisdar to cheat the Government. The patils were proud of their dignity; all the ceremonies of etiquette and respect they were entitled to were minutely laid down, and they would guarrel with a person for withholding any of their honours sooner than for doing them an injury A greater proportion of them could write than of the village hereditary landholders. Otherwise, except in knavery, they wore not more accomplished, and scarcely differed from them in dress, manners, or way of living. The *pdtils* paid to Government every twelfth (sie) year a tax or dahak patti equal to one year's salary.

Accountant, 1820.

The *kulkarni* [Dr. Coats, 29th February 1820, Trans. Bom. Lit. Soc. III. 196-197.] or village clerk kept the numerous village records and accounts. The most important were: (1) the general measurement and description of the village lands; (2) the list of fields with the name size and quality of each, the terms under which it was held, the name of the holder, the rent for which he had agreed, and the highest rent ever yielded by the field; (3) the list of all the villagers whether husbandmen or otherwise, with a statement of the dues from each to Government and the receipt and balance, in the account of each; (4) the general statement of the instalments of revenue; and (5) the detailed account, in which each branch of revenue was shown under a separate head, with the receipts and balance on each. Besides the public records, the village clerk generally kept the accounts of all the

landholders, with each other and with their creditors; acted as a notary public in drawing up all their agreements; and even conducted any private correspondence they might have to carry on, He had lands, but oftener fees, allotted to him by Government from whom he held his appointment.

TWELVE SERVANTS, 1820.

Under the headman were the twelve village servants or bara balutas, the carpenter, the ironsmith, the washerman, the barber, the potter, the silversmith or assayer, the idol-dresser, the water-carrier, the shoemaker or currier the rope-maker, the watchman messenger and guardian of boundaries, and the Muhammadan *mulla* or priest. [Trans.] Bom. Lit. Soc. III. 197-203, East India Papers IV. 158, 582.] There were also the Brahman astrologer to cast activities and the Brahman priest to attend to religions ceremonies. In some parts of the district there was a village watch composed of Bhils and Ramoshis. [Mr. Elphinstone, 1819, Ed. 1872, 15, and East India Papers IV. 158. According to Dr. Coats (29th February 1820) the balutas were hereditary and held their situation from the township. Their hereditary papers or vatan patra, were in the name of the patil and township, and were witnessed by several of the villagers. The deed bound the holder to devote his services to the common good, according to custom, on condition that each landholder paid him a fixed proportion of the produce of the soil. The balutas also received presents for exercising their particular callings at marriges and other rites and ceremonies. The grant or vatan patra, sometimes had the seal and signature of the deshmukh and deshpande or hereditary district revenue officers, and a copy ought to be lodged with the deshpande. The expenses to a baluta on his appointment amounted to £5 or £6 (Rs. 50 or Rs. 60) in perguisites and presents. [Trans. Bom. Lit. Soc. III. 197.] The particular duties of the balutas were:

Carpenter.

The Carpenter made and kept in repair all wooden field tools, the wood being supplied by the landholder. He was paid 200 sheaves of corn and about 48 pounds (24 shers) of grain for every 22½ acres (30 bighas) under tillage, and his dinner or a few pounds of grain a day so long as he was engaged in mending field tools. He furnished the marriage chaurang or stool on which the bride and bridegroom were bathed. He supplied travellers with pegs for their tents, and for picketing their horses. During two or three days in the year, in return for a dinner, Government, the deshmukh or hereditary revenue

superintendent, and the *deshpande* or hereditary revenue accountant were entitled to his services.

Blacksmith.

The Ironsmith or Blacksmith made and kept in repair all iron field tools. He made the sickles, the hoes, and other field tools, and the simple lock and chain which fastened their doors, the villagers finding the iron and the charcoal. For tiring cart wheels, as this was troublesome, he received a money present. He performed the *bagad* or hook-fastening into the back of devotees who swung before Bahiru and Hanuman. He shoed the horses of villagers and travellers, but he was not a good farrier. He every year furnished a set of horse shoes and twenty-four nails to Government who supplied him with iron. Ho was paid about thirty-six pounds (18 *shers*) of grain on every 22.½ acres (30 *bighas*) or one-fourth less than the carpenter.

Washerman.

The Washerman washed the clothes of male villagers; the women generally washed their own clothes. He spread cloths for the bride and bridegroom to walk on at one of the marriage processions, and for parties to sit on at marriages and other festivals. For this he received special presents. He washed the clothes of travellers, and expected a present for his trouble.

Barber.

The Barber shaved the villagers and cut their nails on a lucky day once every fortnight. He kneaded the muscles and cracked the joints of the headman and village clerk on holidays, and of all travellers of distinction who came to the village. He was the village surgeon, and played on the pipe and tambour at weddings and on other occasions. He did not act as a torch-bearer, as he did in some other parts of the country. When the headman went abroad, the barber went with him, and carried and cleaned his copper vessels; and, on village festivals, with the water-carrier and potter, he acted as cook, and, before and after eating, handed the party water to wash. When the bridegroom arrived at the village to take away the bride, the barber led his horse to the bride's house and received the present of a turban. He trimmed the tails of the oxen at the sowing season and received a present of grain.

Potter.

The Potter supplied the villagers with the baked earthen vessels they used for cooking, for storing spices salt and grain, and for carrying and holding water. He also furnished travellers with such vessels as they wanted. He beat the *danka* a kind of drum, and at marriages repeated verses in honour of Jami an incarnation of Bhavani. At the harvest homes or *davra* he prepared the *barbat* or stewed mutton. He made tiles and bricks, and received a special payment for them. Near Poona potters were freed from the *balut sara* or village servants' rent because they had been of great service in tiling Balaji Vishvanath's house.

Silversmith.

The *Potdar* or Treasurer was always a silversmith. He examined the coins when the taxes were paid; and on satisfying himself they were good, stamped his mark on them, and kept them in his treasury, until enough was received to send to the sub-divisional treasury under charge of an escort of Mhars. When employed as a silversmith he was paid $\frac{3}{4}d$. to 2s. (Re. $\frac{1}{32}$ -1) the rupee weight according to the workmanship.

Idol-dresser.

The Gurav was the village god-dresser and ministrant. He every morning poured water over the village Hanuman, Bahiru, and Mahadev, marked the brows of Bahiru and Hanuman with sandalwood and oil, and dressed them with flowers. He swept the temples, smeared them with cowdung once every eight days, and every night lighted a lamp in each. At the new-moon he anointed the idol of Hanuman with cinnabar and oil, and Bahiru every Sunday with oil only. Each family in the village gave him daily a small quantity of flour which he made into cakes, and offered at noon to the idols, and afterwards took to his family. During the nine eves or *navratra* that end in *Basra* in September-October he gave each family a handful of flowers to make garlands which were offered to Bhavani. He daily supplied the village clerk with Indian fig leaf platters joined with skewers or *patravalis*, and on festivals he made leaf-plates for all the villagers.

Water-carrier.

The Water-carrier, who was of the Panbhari division of Kolis, kept vessels constantly filled with water at the village office for the use of all Hindus. If as was usual a beggar lived in the building, the water was left under his charge that it might not be defiled. The water-

carrier supplied water to travellers, and for marriages and festivals. He brought food for the persons who were fed by the village, from those whose turn it was to supply it. He lighted the lamps every night at the village office, swept it, and every eight days smeared it with cowdung. When the village was on the bank of a river the water-carrier pointed out the ford to travellers; and when the river was not fordable he took people across on a float buoyed by gourds or inverted earthen pots.

Shoemaker.

The Shoemaker or Chambhar kept in repair the shoes of the villagers, and every year supplied the *kulkarni*, *patil*, *chaughula deshmukh*, and *deshpande* with a pair of new shoes. The other villagers paid him about a rupee a year for making their shoes and supplying leather. He made water-bags, and supplied the cart and plough drivers with leather thongs for their whips or *asod*. He mended shoes, bridles, and other articles belonging to travellers, but expected a present. The skins of all sheep killed is the village were his perquisites. He did not eat beef or carrion, and was allowed to live within the village. His wages were the same as the carpenter's.

Ropemaker.

The Mangs made hemp ropes for the use of the husbandmen, and a strong raw hide rope used in yoking oxen. The husbandmen supplied him with the materials. He castrated bulls in their fourth year. [The bull was thrown down, and a string tied rather tight round the spermatic cord. The glands were then well rubbed With butter and turmerie, and beaten with a tent-peg. Swelling and absorption of the gland soon followed, and the animal was fit for work in a few days. Dr. Coats, 1820, Trans. Bom. Lit. Soc. III. 200-201 He made the muzzle or *muski* worn by oxen when weeding or treading corn. On *Pola* The Pola or Ox Day varies in different parts of the Deccan. or Ox Day, that is the October or A'shvin new moon, the Mangs hung mango leaves on a grass rope across the village gate, the village office or chavdi, and the doors of the chief inhabitants. This was supposed to ensure good luck to the village during the year. The Mangs were considered cruel and revengeful. They acted as executioners, and, it was said, might be hired as assassins. They lived outside of the village, and were not allowed to enter the house even of a Mhar.

Watchman.

The Watchman, who was of the caste known as Mhar Dhed or Parvari, although held outcaste, and not allowed to have a house within the village or to enter the house of any of the villagers, had great weight, and was an important member of the community. The number of Mhar families belonging to each township was from five to fifty according to its size. They lived in a hamlet or mhar-vada on the east side and within call of the village The Mhars' duties were various. The Mhar did everything and had no special calling, He ran errands, kept a current account in his head of the distribution of the village land, and settled boundary disputes for four or five generations preserving particulars of old boundary fights. Capt. Robertson. 10th Oct. 1821, in East Iadia Papers, IV. 582. The most important were to prevent encroachments on the village boundaries of which they were supposed to have an accurate hereditary knowledge. In boundary disputes their evidence was generally considered conclusive. They gave their evidence by walking round the disputed boundary under an oath, in a solemn and formal manner accompanied by the headman and villagers, who marked their track as they went. They were the bearers of all letters on the business of the township, and generally of all messages. They carried the village rent instalment to the sub-divisional head-quarters. They were present at all councils or *panchaits* involving any hereditary right of the community and their evidence carried great weight. They furnished wood at marriage-feasts, which entitled them to a present of clothes from the bride. They supplied the village headman and his deputy and the village clerk with firewood on Holi in February-March and on Basra and Divali in September-October and in November. They carried the fuel required for burning the dead, and, as a perquisite, were given the winding sheet in which some money was always tied. They carried to the next village the baggage of travellers, except the cooking vessels, clothes, and eatables, which would be defiled and were therefore carried by Kunbis. During their stay at the village they supplied travellers with firewood, cleaned their horses, and watched them during the night. They furnished all guides or vatade. They had charge of the village flag and gates if the village had them, and opened and shut the gates morning and evening. Besides, a beadle that is *veskar* or *yeskar* of this tribe was always in waiting at the village office or chavdi, and reported to the headman the arrival of all strangers, and all remarkable occurrences. He was told to keep troublesome visitors from the headman and clerk, by saying they were from home or sick; and to protect the village generally from annoyance, by any subterfuge his ingenuity might suggest. He was the official medium of communication between the headman and the villagers. He was responsible that none of the villagers were called on to act as porters out of their turn. He kept an account of the Kunbi

families whose turn it was to supply beggars, Government servants, and others, with their dinners. He attended all travellers during their stay at the village; and all their wants were supplied and paid for through him. The beadle was relieved at stated periods, generally every week. While on duty, he received daily from the patil half a cake, and from' each of the cultivators one-fourth of a cake at noon, and every evening a helping of porridge or ghata from each family; which was generally more than enough to supply himself and his family with food. The Government and revenue officers, in return for his food, had a claim on the services of a Mhar for a certain number of days in the year; the Government for three months; the deshmukh for one month; the deshpande for fifteen days; and the sar-patil for eight days. During this period they were employed to bring wood and grass, and to look after horses. The service was termed vapta (rabta?), and was sometimes commuted into a money payment. In each township the Mhars had a plot of freehold land assigned them near their hamlet; this was called hadhi or the place of bones where all dead cattle were brought and cut up. They also held another plot of land called hadola which paid a small guit-rent. Each of the hereditary families got forty sheaves of corn in the straw, and about eight pounds or four shers of winnowed grain for every sajgani or thirty bighas that is about 22½ acres of corn land. The skin and carcasses of all dead animals, which it was their duty to remove, belonged to them.

The Muhammadan Mulla or priest killed the sheep at sacrifices and festivals; he received allowances of grain and straw, and when there was a Muhammadan place of worship in the village, some land was usually attached to it, of which he had the profits.

Of these village officers and servants the only, two, besides the headman and the accountant, who had Government duties were the silversmith assayer or *potdar* and the messenger or Mhar. [Mr. Elphinstone, 25th Oct. 1819, Ed, 1872, 15, East India Papers IV. 158.] The payments to the village staff were a heavy burden on the people, representing, according to Captain Robertson's calculations, about sixteen per cent of the whole produce. [Capt. Robertson, 10th Oct. 1821, East India Papers IV. 578. He thought that the payments to the village officers were baneful and harassing in the villagers. It was difficult to estimate how heavy a burden they were. He thought them the heaviest drawback to improvement with which the people were burdened. East India Papers, IV. 582.] The leading officers, the headman, his assistant, and clerk, besides their rent-free lands and many complimentary offerings, were paid an allowance or *ghugri* which averaged about seven per cent on the assessment and was

divided among the headman, the assistant, and the clerk. This cess and other offerings were always paid by casual holders but in many villages the hereditary holders were exempt. [East India Papers, IV, 582.] Besides the amounts which were paid to them direct, headmen used considerable sums out of village expenses. These which in former times had varied from six to twenty per cent, under British management had been reduced to 4½ per cent. [Capt. Robertson, 10th Oct. 1821, East India Papers IV. 581.]

Hereditary Officers.

The next officers to whom the villagers had to make payments were the hereditary revenue officers of larger or smaller groups of villages or tarafs and some of districts or subhas. They were superintendents or deshmukhs and accountants or deshpandes and some districts had a desai besides the deshmukh. The higher hereditary officers in cities and towns were styled shets and kulkarnis. The offices of deshmukh and deshpande were hereditary and saleable. Except for offences against the state these officers were never set aside or deprived of their emoluments. The Maratha government had sometimes appointed them to do the work of *mamlatdars* but such appointments were only for a definite time and as a special case. They were properly mediums between the collectors of the government revenue and the headmen of the villages. [East India Papers, IV. 582.583.] One of the chief duties for which they were originally appointed was to keep a record of former payments by each village under their charge. In consequence of the farming system few of them had these documents at least in anything like a perfect form. Mr, Chaplin, 20th Aug. 1822, Bom. Gov. Rev. Rec. 68 of 1823, 170-171. Their chief duty was to sit in the Collector's office or *kacheri* and act as umpires between the members of the Collector's establishment and the heads of their villages. They were the representatives of the people and in Captain Robertson's opinion were very useful in moderating the demands of the Collector's establishment and in influencing the headmen to admit rightful demands. The mass of the people looked to them with respect. The position of deshmukh was the highest position to which a Maratha could rise. The great Maratha chiefs, Sindia Holkar and the Raja of Satara, even Bajirav Peshwa himself, valued the title and the local position and power of a deshmukh. Though in no way bound to military service, if a deshmukh or deshpande joined the army, his sovereign made much of him and gave him good pay and a large establishment. The people's respect for these officers showed no signs of declining. Their claims or haks, which were in addition to the Government demand on the village, were large. They were taken in

kind and they sometimes allowed them to remain eight or nine years in arrears. In 1820 their claims represented about 4.83 per cent of the whole demand. Besides their claims on the villages, *deshmukhs* and *desh-pandes* in return for special services were occasionally given rent-free villages which were termed *izafat*. [East India Papers, IV. 587.] Captain Robertson thought them useful so long as they were not allowed to acquire power as Government agents. [Capt. Robertson, 10th Oct. 1821, East India Papers IV. 582-583. Bom. Gov. Rev. Rec. 698 of 1836, 85-86. At least in some parts of the country the hereditary district officers were afterwards (1835) believed to have falsified the village records. Bom. Gov Rev. Rec. 698 of 1836, 85-86.]

Assessment, 1820-21.

In addition to what they had to pay to the village craftsmen in return for their services, to the heads of the village under village expenses, and to the hereditary district officers in liquidation of their claims, the villagers had to meet the demands of Government. According to Captain Robertson's calculations the Government demands varied from thirteen per cent of the outturn in good land to seventeen per cent in middling land. [East India Papers, IV. 578.] In his opinion, of the whole amount of the Government demand, about nine-tenths belonged to the regular assessment and one-tenth came under the head of cesses. [East India Papers, IV. 576.] Except in some villages where each class of land had a separate rate, which was supposed to have been fixed by Malik Ambar (1600-1626), hereditary holders paid a uniform rate or dar which was adjusted by varying the size of the bigha in accordance with the quality of the land. In some viliages the land was divided into parcels or *munds* each of which paid a fixed rent and some villages had a thika or tika that is a detailed mund settlement where each field in the larger plot had a fixed rent. [Extract Revenue Letter from Bombay, 5th Nov. 1823, East India Papers III. 805.1 In the hilly west the rent had been fixed from a glance measurement of the produce or pahani, and the Government share was commuted for a money payment according to the crop cultivated. In lands which grew upland or varkas crops the Government share was estimated at a half to one-third of the crop which was commuted into a money payment. Some parts of the Paun and Andhar Mavals had traces of a village-rent or khot system which had been in force before the introduction of the revenue farming under Bajiray. [Bom. Rev.Letters to the Hon. Court, 23rd Feb. 1822 paras32-35, and 5th Nov. 1823, East India Papers III. 806. Mr. Chaplin, 21st Nov. 1821 and 20th Aug. 1822 para. 85.] The highest assessment on a bigha [Great diversity was noticed in the land measures in use, but in the

former measurements if which there was (1823) any record the bigha equalled about three-fourths of an acre. Some partial new surveys had been made by the Marathas with a shorter rod by which the traces of the old survey had been nearly lost. In Poona the use of the bigha had been superseded by other measures, multiples of it; and in some places large pieces of land were assessed in the lump at a given sum. These measures were: 20 mans equal to a khandi; one khandi equal to 20, 30, or 35 bighas; one takka equal to 48 bighas; one rukka equal to 5, 8, or 10 bighas; one pakka bigha equal to 3, 4, 8, and even 15 ordinary bighas. East India Papers, III. 805. Mr. Chaplin, 20th Aug. 1822, Ed. 1877, 22. Capt. Robertson (10th Oct. 1821) gives the following as the general standard of the land measure: Five cubits or hats and five muthis or fists of five different persons made a rod or kathi of about 9 feet; 20 square rods one pand; 20 pands one bigha-, 5 bighas one rukka; 24 rukkas or 120 bighas one chahur or takka; and six rukkas one khandi. East India Papers III. 805; IV. 572, 573.] of dry-crop land was 7s. 6d. (Rs. 3 ¾) and the lowest was 3d. (2 as.) In garden lands the rates varied from 2s. (Re. 1) to £1 10s. (Rs. 15). [Capt. Robertson, 10th Oct. 1821, East India Papers IV. 584. See East India Papers, III. 807.]

Cesses, 1820-21.

According to Captain Robertson's calculations the cesses or pattis represented about 1½ per cent of the produce of the district. [Capt. Robertson, 10th Oct. 1821, East India Papers IV, 576, 578.] They were levied both from hereditary and from casual holders. The most unjust or harmful were abolished and besides the house-tax and the tax on callings about twenty-four were kept. [East India Papers, III. 805-806, 810; IV. 622-623.] In Poona the people who paid the mohtarfa [Mohtarfa comprised house and shop taxes, loom taxes, taxes on traders, taxes on professions, and a house tax from a few landholders, East India Papers, III. 810. or house and trade tax were classified and assessed according to a very arbitrary estimate of their wealth and trade. The highest class of bankers paid £4 (Rs. 40) and the highest class of moneychangers £3 18s. (Rs. 39); grocers paid £5 (Rs. 50), grain dealers £3 to 6s. (Rs. 30-3), and roadside moneychangers and fruit and vegetable sellers paid about a half-penny or ¼ anna a day. Except this tax on the shopless hawkers, the rates were light. One serious objection to the tax was that many wealthy traders were free from all charge. The taxes on professions were very unequal, varying from 2s. to £3 (Rs. 1 - 30). [Bombay Rev. Letter, 5th] Nov. 1823. Past India Papers III. 810. Of the twenty-four other cesses which were continued, some were levied on the land, wome on

the village, and some on the individual holder. [In 1821 the greater part of the following twenty-four cesses were found in most villages of the Poona plain country: A Grain Cess, galla patti, originally to supply grain for forts and for the government stud, changed to money; a Butter Cess, tup patti, changed to money; a Straw Cess, kadba patti, changed to money; two Rope Cesses; ambadi and sut pattis changed to money; a Grass Cess, gavat patti, changed to money; a Money Cess, kharch patti; a Firewood Cess, karsai patti, changed to money; a Goat Cess, Dasra bakra, its price taken; a Shoe Cess, charmi joda, their value taken; New Year's Sesamum, til sankrant, levied in cash; Skins, charsa, taken in cash; Exchange, bazar batla; Servant Cess, naukar mane, changed to money; Saddle Stuffing, lokar, taken in cash; Horse Blanket, ihul, levied in cash; Contingent Charges, sadilvar patti ; small Extra Cess, bachak patti; Messenger Cess, shir patti, lump sump taken; Curds Cess, dahi patti, levied in cash: Oil Cess, tel patti, value taken; Watchman Cess, havaldari, taken in money; Clerks' Cess, karkuni, taken in cash; a Miras Cess levied once in three years on hereditary holders. Of those twenty-four cesses ten were found in the hilly west, straw, grass, money, shoe, new year's sesa-mum, firewood, skins, rope, contingent charges, and *mirds* cess. Twenty other cesses were also collected in this part of the district. A Sidi's Cess or *Habshi* patti said to be to keep the Konkan Abyssinians from entering the Deccan; a Beggar's Cess gosavi patti; a Ramoshi's Cess; an Extra Cess known as abhi patti; a Mango Cess, ambe dhdli; an unknown labbe (?) patti; a Molasses Cess, gurhal patti; a Fowl Cess, kombdi patti; a Thorn Cess, kante modnaval, to make up for a mamlatdar whose feet were pricked with thorns; a Kulkarni's Cess; a Survey Cess, pahani kharch; an Undefined Cess, patti; a Cucumber Cess, kakdi bhopla; a Leaf Shade Cess, lerdya (?) patti; a Mango Tree Cess, amba takka; a Leaf Thatch Cess, pan tattya; a Customary Cess, quinda (?)patti; a Pestle Cess, musal patti; a Leaf Dish Cess, patraval patti; and a Deficiency Cess, kasar patti. Mr. Chaplin, 20th August 1822 (Ed. 1877), 139-141, East India Papers IV. 622-623.]

There was no city in the district except Poona. But there were eleven towns of respectable size and trade, Chakan, Ghera, Jejuri, Kendur, Khed, Navlakh Umbra, Pabal, Paud, Sasvad, Talegaon Dabhade, and Talegaon Dhamdhere. The houses in these towns were comfortable buildings of stone and mud, covered with tiles; some of them were two storeys high. The chief inhabitants were traders, bankers, and Brahmans both of the Deccan and of the Konkan. In all a good deal of trade centred. The chief manufactures were coarse woollen and cotton cloths, and Poona-made gold and silk cloths which vied in richness with the silks of Paithan. [Capt. Robertson, 1st May 1820, Last India]

Papers IV. 405; Bombay Revenue Letter 27th Nov. 1822, East India Pap. rs III. 793-794.] Poona had suffered from the change of government. The general peace all over India took from the bankers their favourite war investments, and all classes of the townspeople suffered from the stopping of the great and lavish expenditure at Bajiravs court. [Capt Robertson, 10th Oct. 1821, East India Papers IV. 588.]

In 1821 the year's revenue was about £135,200 (Rs. 13,51,422) or about 7s. (Rs. 3%) a head of the population. Of the whole amount about £109,000 (Rs. 10,89,254) were derived from land [East India Papers, IV. 525. Of about £128,400 (Rs. 12,83,399) the total or gross settlement or jamabandi of 1820-21 about£19,400 (Rs. 1,94,145) were deducted probably chiefly on account of remissions and claims. This left as net revenue £109,000 (Rs. 10,89,254), and sayar or miscellaneous sources; £23,600 (Rs. 236,237) from customs; and £2600 (Rs. 25,931) from farms and town taxes. The cost of collecting the revenue was about £9370 (Rs. 93,666) or about seven per cent on the collections; magisterial and judicial charges were about £10,300 (Rs. 1,03,168); the Collector's and assistants' salaries £5100 (Rs. 51,000), and the outlay on militia was £7450 (Rs. 74,418). That is a total expenditure of £32,220 (Its. 3,22,252) or about 20 per cent of the revenue. [Capt. Robertson, 10th Oct. 1821; Rat India Papers IV. 525,1

REVENUE SYSTEM, 1820-21.

Under the English system the management of the land revenue centered in the Collector. The Collector was also magistrate and judge of circuit, but his chief duties were, as head revenue officer, to travel over his district, to fix the rental to be paid by each village, as far as possible to fake precautions that in each village the whole amount was fairly shared among the landholders, to detect and punish frauds against Government and oppression of the villagers, and by the grant of leases and other privileges to induce the people to bring the arable waste under tillage. At the beginning of a new year, that is in August, the village headmen and clerks prepared returns showing the state of cultivation in the village, the whole amount due to Government, and the share due from each landholder. [When the English system was fairly introduced, the village clerk or *kulkarni* was bound to prepare the six following returns: (1) The jamin jhada or land register that is a record of all village holdings and fields and of their holders; (2) the lavni patrak or tillage statement showing the amount due by each holder to Government; (3) the tahsil or receipt book showing daily

payments by the landholders; (4) the *botkhat* or list of accounts showing the receipts from each holder and what had been done with the receipts; (5) *the jhadti* or balance sheet which was a statement for the village receipts and payments drawn up at the close of the year; and (6) the *mohtarfa yad or* a memorandum of dues on account of house and other taxes. Besides these the village clerk kept memoranda and registers of leases. East India Papers, IV. 587-588.]

When the Collector came to the village or to its neighbourhood, under his immediate superintendence, or, if he was not on the spot, under his orders, his establishment examined the village clerk's statement of the current year and compared it with the settlement of the year before, and, with the help of the district hereditary officers, settled the lump sum which the village was to pay. After 1819-20, when, in addition to the settlement with the head of the village, papers were passed showing what each landholder had to pay and that he was willing to pay it, the Collector's establishment were unable to complete the detailed village settlement. This duty was left to the mamlatdar. [East India Papers, III, 794; IV, 579, 591.] Besides carrying out the detailed or individual village settlement the mamlatdar superintended the collection of the revenue, managed the police, received civil complaints, and referred the complainants to jaries or panyhaits, and heard criminal complaints and sent the complainants to the Collector. He had a secretary or *shirastedar* to keep his records, an accountant, and some other assistants. The mamlatdar's powers were limited, and, at least in principle, the system of fixed pay and no perquisites was introduced. The mamlatdar's pay was fixed at £7 to £15 (Rs. 70-150) a month, and the pay of his secretary at £3 10s. to £5(Rs. 35-50). [Mr. Elphinstone, 1819, Ed. 1872, 30-31, East India Papers IV. 168-169 In carrying out the detailed village settlement the chief duties of the mamlatdar and his staff were to detect frauds in the village returns, and see that the statements corresponded to the actual condition of the village; to discover hidden sources of revenue; to assign to each landholder his proper share of the village rental, and to ascertain that the village officers made no extra levies; to make certain that the villages paid their instalments when they fell due, and that all the revenue was regularly forwarded to and accounted for by the head-quarter office.

As mediators between the Collector's establishment and the village headmen who together fixed the amount of the village settlement, there came the district hereditary officers, who, when the amount of the village rental was being discussed, sat in the Collector's office or kacheri and acted as umpires moderating the demands of the

Collector's establishment and persuading the headmen to agree to rightful demands. [Captain Robertson, East India Papers IV. 582-583.] In the early years of British rule one of the chief objects of the revenue officers was to introduce a system which should prevent the village officers or the mamlatdar from taking more than his right share of the village rental from each landholder. As has been noticed in 1818 and 1819 the settlement continued to be made with the headman for the whole village or *mauzevar*. But in 1819-20 a beginning of an individual or rayatvar settlement was made by the members of the Collector's establishment ascertaining that each holder knew at what amount the headman had assessed him and admitted that this amount was fair. In 1820-21 the Collector's establishment inquired how much fresh land was taken for tillage; how much land under tillage was kept hid; and whether there were any oesses which had escaped notice in the former year. After these inquiries, on the basis of the last year's settlement, in consultation with the village and hereditary officers, the Collector's staff determined what each village should pay; and the mamlatdar inquired into and fixed the share of the whole village demand which should be recovered from each holder. [East India Papers, IV. 591.] This system was faulty as there was no check on the mamlatdar and no test to prevent collusion between him and the headman in unfairly distributing the individual payments. Accordingly in the next year (1821-22) a system was completed under which each holder received a deed or pattet, of what he was asked to pay and passed an agreement or kabulavat to pay the amount fixed. [Bombay Revenue] Letter 27th Nov. 1822, East India Papers III. 794. The issue of these individual agreements greatly reduced the power and the emoluments of the village officers who much against their will were relieved of many of their duties. [East India Papers, IV. 582.] Under this new system the settlement was introduced into a village in one of two ways. Either the whole sum due by the village might be ascertained and his share allotted to each landholder; or the shares due to the different holders might be determined and the village rental be found by adding all the shares together. Unless, which was seldom the case, authentic details of the quality and quantity of land in each man's holding were available, it was extremely difficult to fix each man's share. The whole amount paid by the village through a series of years was generally known, and, as a rule, it was best to fix the whole amount in the first instance and from this to allot his share to each holder. The sum fixed as the village rental included all cesses, claims, and village expenses. After fixing the whole amount due from the village, the Collector's staff were expected to allot the shares to the different holders. But this part of the work they were seldom able to complete. It was entrusted to the mamlatdar and his staff under strict

injunctions not to leave it to be done by the district or village officers. In making the Individual settlement the mamlatdar was chiefly guided by the village land statement or jamin jhada. This professed to show the state of cultivation of each plot of land in the village. But the statement was generally full of mistakes and frauds; it could not "be trusted until it had been checked by the shekhdara or mamlatdar's clerks who made separate returns, by special or personal inquiries on the part of the mamlatdar, by direct examination of the villagers, and by taking advantage of rivalry and jealousy among the families of the headman or village clerk. The following were among the frauds which were commonly practised by village headmen and clerks. The names of people paying the house-tax were left out; guit-rents leviable from alienated lands were not shown; in other lands something less than the full rental was shown; lands under tillage were entered as waste or as fallow and garden lands were entered as dry lands. Bom. Gov. Rev. Rec. 16 of 1821, 705-729; Appendix to Mr. Chaplin's Report, 20th August 1822, Ed. 1877, 129. After the main land assessment was fixed a minute inquiry was necessary into the cesses or pattis. In all these inquiries the Collectors were enjoined to use and to enforce the utmost caution in keeping the assessment moderate. They were warned that in assessing villages it was better to be below than to be above the proper scale, and that the excessive demand of one year could seldom be retrieved by three years of moderation and indulgence. Great care was required in preparing the landholder's paper or patta which was drawn up in a very detailed and elaborate form. [Mr. Chaplin, Appendix to Report of 20th August 1822, gives an example of the deed or patta passed to the landholder. Ramji Maratha of Loni in Haveli in Poona for the *Fasli* year 1230 (A.D. 1820-21), you have to pay fifty-six rupees; Of this for three fields of dry land of 25 bighas, Rs. 2434; for three bighas of garden land, Rs. 24; a straw cess Rs. 14; a buffalo cess Rs. 2; and a house cess Rs. 4; total Rs. 56. This you must pay at the regular instalments and you must not give the patil or kulkarni any more than this. You have agreed to be security for the payments of the other villagers and any arrears might be recovered by a second assessment. 10th December 1820. In some villages the clause regarding the second assessment was left out.] The people were told when the instalments would fall due and care was taken not to levy any part of the rental until after the crop from which the instalment was to be paid was reaped. [Captain Robertson, 10th] October 1821, East India Papers, IV. 580. No security was required except the general security of making the villagers responsible for each other which was known as chain or mutual security, janjir jamin, and which was liable to be enforced by a second settlement. [Appendix to Mr. Chaplin's Report of 20th August 1822, Ed. 1877, 134; Captain

Robertson, 1821, East India Papers, IV, 587. The passing of receipts for all collections, especially for the collection of the villagers' instalments by the village officers was insisted on, and an entry showing the coins received and the date of payment was required. The coins paid were sent to the treasury with lists made by the mamlatdars in sealed bags attested by the shirasteddrs. Each person through whose hands the money passed gave a receipt, the last being the Collector's receipt to the mamlatdar. Copies of the Collector's receipts were kept at head-quarters. [Captain Robertson, 10th October 1821, East India Papers IV. 581. In the first years of British management the revenue was collected without difficulty. Distraint was almost unknown. It was not allowed when the person who had failed to pay was known to be poor. [Captain Robertson, 10th October 1821, East India Papers IV 526. I In October 1821 only £646 (Rs.6460) were outstanding of which £61 (Rs.610) belonged to 1818-19 and £585 (Rs.5850) to 1819-20. [East India Papers, IV. 526.] Under the Maratha government advances had been made to husbandmen at 12 per cent a year. Under the British in the first years the amount of advances was increased and no interest was, charged [Captain Robertson, 10th October 1821, East India Papers IV, 584.]

Seasons, 1821-22.

The season of 1820-21 was favourable. Cultivation spread and there were no complaints of over-assessment. The only difficulty which occurred was that the headmen of a group of villages in Pabal, finding the individual settlement reduce their power of private taxation, incited the people to refuse to take their deeds or pattaa. Before the close of the year the distress which the general establishment of peace caused to the military section of the people of Poona, became more marked, and large numbers who had remained idle in the hope of some more suitable employment, were at last forced to take to husbandry. [Bom, Gov. Rev. Rec, 117 of 1825, 514-515. From this cause the increase of tilllage in 1821-22 was greater than in the previous years. The crops were again good and the average rupee price of grain fell from about 32 to 56 pounds (4.7 *paylis*). [The rupee prices were, 1819-20, 234] and 3 paylis; 1820-21, 4 paylis; and 1821-22, 6 and 8 paylis. Bom. Gov. Rev. Rec. 117 of 1825, 517-518. The settlement was again made with the individual holders. The fall in the price of grain caused discontent among several sections of the husbandmen. The chief difficulty was in the case of certain villages which had formerly paid a kharedi galla a commutation of the money cess into grain for the supply of Maratha posts and forts.

In 1820-21 it had been settled that they should pay in cash on the basis of about 32 pounds (4 paylis) the rupee. As the price had in some places gone down to one-half of this or about 64 pounds (8 paylis), the alternative was given them of paying in kind but as they objected to grain payments the former rates were continued. So serious a difficulty did the people find in disposing of their grain that the Collector found it necessary to postpone the date for paying the instalment. [Captain Robertson, 20th September 1822, Bom. Gov. Rev. Rec, 72 of 1823, 128; and MS. Selections, 157 (1821-1829) 1st February 1825, Bom. Gov. Rev. Rec. 117 of 1825 515-519.] £1404 (Rs. 14,040) were remitted. [Bom. Gov. Rev. Rec. 72 of 1823, 124, 128, 129. The land rent including cesses and miscellaneous revenue amounted to £160,100 (Rs. 16,01,000) against £153,635 (Rs. 15,36,350) in the preceding year. After deducting claims or haks and village expenses, the net revenue for collection amounted to £139,058 (Rs. 13,90,580) against £134,447 (Rs. 13,44,470); the collections amounted to £133,515 (Rs. 13,35,150) against £132,520 (Rs. 13,25,200); and the outstandings were £5543 (Rs. 55,430) against £1926 (Rs. 19,260). [Mr. Chaplin, 29th September 1823, Bom. Gov. Rev. Rec, 72 of 1823, 36.]

1822-23.

In spite of the cheapness of grain up to September 1822, except in Indapur where a number of the people had returned to their old homes in the Nizam's country, there seemed to be no signs of overassessment. The value of land was rising and disputes connected with landed property and shares of estates, that had lain asleep for years, had become common and keen. In the two previous years the tillage area had increased by about £80,000 bighas yielding a yearly revenue of about £8000 (Rs. 80,000). [Captain Robertson, 20th September 1822, Rev. Rec. 72 of 1823, 224-226. In spite of the partial failure of some of the crops the harvest of 1822-23 was again abundant. Grain fell to about 110 pounds (13-14 paylis) the rupee in the remote parts of the district and to about 80 pounds (10 paylis) near Poona. [Bom. Gov. Rev. Rec. 117 of 1825, 522. In 1820-21, the price was 4 paylis and in 1821-22 it was 6-8 paylis.] There was no mention and no record of such low prices. The fall caused much distress; even those who had reaped good harvests could hardly find a market for their grain. Headed by the patils of Pabal, many of whose indirect gains had been stopped by the individual settlement, the people, came in crowds and mobbed the Governor in Poona. The cry of over-assessment was

raised by some of the English officials, but Captain Robertson contended strongly that the only causes of distress were the fall of grain prices and the want of employment and expenditure at Poona. The commutation rate of *kharei galla* or grain, that used to be taken in kind was lowered from about 32 to 64 pounds (4-8paylis). In 1822-23 the realization showed a decline amounting altogether to about one-seventh of the whole revenue. One-fourth of the entire loss was in Indapur from which numbers had move to the Nizam's country. [Captain Robertson, 1st Feby. 1825, Bom. Gov. Rev Rec. 117 of 1825, 522-528.]

1823-24.

The next year (1823-24) was a season of scanty rain and of distress. The early harvest in about half of the district was fair, in the other half of the district the crops were either chiefly or entirely failures. The late or cold weather harvest was a complete failure. The garden and watered crops were blighted by the east wind. The cattle suffered so severely from want of fodder and want of water that the Collector sent a number of the people to the Nizam's country to stay there till June 1824. Large numbers of the landholders also of their own accord left Poona to take up lands in the Nizam's country and in Ahmadnagar. [Captain Robertson, Collector, 25th November 1823, Bom. Gov. Rev. Rec. 74 of 1823, 13-16; 1st February 1824, Rev. Rec. 95 of 1824, 3; 1st February 1825, Rev. Rec. 117 of 1825, 529. What added to the difficulties of the people was that in spite of the failure of crops grain continued extremely cheap. [Mr. Pringle, 29th January 1824, Bom. Gov. Rev. Rec. 95 of 1824, 6-15. Mr. Chaplin, 10th October 1825, Bom. Gov. Rev. Rec. 117 of 1825, 404. The Collector and the Commissioner agreed in recommending the greatest moderation in levying the revenue, and their views met with the full approval of Government. Remissions were granted varying from 25 to 75 per cent and in some cases the whole demand was foregone, [Mr. Chaplin, 29th] November 1823, and Gov. Letter 1856 of 11th Dec. 1823, Bom Gov. Rev. Rec. 74 of 1823, 11-12, 17. Captain Robertson, 1st and 4th February 1824 - Mr. Chaplin, 5th February 1824; and Gov. Letter 319 of 23rd February 1824. Bom. Gov. Rev. Rec. 95 of 1824, 1-41. The distress continued in 1824. The usual May showers failed and there was very little rain either in June or in July. Grain which throughout the cold season had kept wonderfully cheap, now rose from about 80 to 32 pounds (10-4 paylis) and then to about 20 pounds (2½ paylis). [Bom. Gov, Rev. Rec. 117 of 1825, 528-530.] In 1823-24 the total revenue for collection amounted to £91,556 (Rs. 9,15,560) against £120,827 (Rs. 12,08,270) in 1822-23; the collections amount-ed to

£73,091 (Rs. 7,30,910) against £103,788 (Rs. 10,37,880), and the outstandings amounted to £18,465 (Rs. 1,84,650) against £17,039 (Rs. 1,70,390) in 1822-23. In 1823-24 the very large sum of £40,747 (Es.-4,07,470) was remitted. [Bom. Gov. Rev. Rec. 117 of 1825, 416, 473.]

1824-25.

At the close of the hot weather of 1824 large sums were granted in advances. The people met the efforts of Government to lighten their distress by showing the greatest industry and emulation in preparing and sowing their fields in June 1824. But again the rain failed except in the west where the harvest was good. In the centre and east the early harvest came to nothing, the late crops which were green and promising till November dried from want of rain and dew and yielded almost no return. [Bom. Gov. Rev. Rec. 123 of 1825, 337-339; Rec. 117 of 1825, 405, 537-538.] Before February of 1825 the people had deserted the country. Their cattle were almost all dead and in many villages the great drought had left no drinking water. Still the spirit of the people was not broken. The rainfall had been so slight that even the weeds had died and the fields were ploughed and clean ready to be sown when the rains of 1825 came. [Bom. Gov. Rev. Rec. 117 of 1825, 537-538. The people were reduced to the greatest distress. Most of their cattle were dead. Grain had risen to high rates, The price of the necessaries of life had nearly doubled.' Mr. Pringle, 8th March 1825, Bom. Gov. Rev. Rec. 123 of 1825, 366-367.] and in sowing the early and late crops of 1824, both of which had failed, they had incurred heavy expenses. [Bom. Gov. Rev. Rec. 123 of 1825, 366-367.1 Except from the west in 1824-25 little or no revenue was realised. [Bom. Gov. Rec. 117 of 1825, 473-476, 538; Rec. 123 of 1825, 337-339.]

1825.

During these years of failure of crops and distress a somewhat hot correspondence passed between the Collector and the Commissioner as to whether the distress was to any considerable extent due to overassessment. At first Captain Robertson stoutly protested against the view that any of the depression was the result of over-assessment. But as troubles increased in February 1825 he admitted that the demands might have been greater than the people could well meet. He fully agreed with the Commissioner that to help the people to rise from the low state into which they had fallen, would require most generous and tender treatment. At the same time he thought that besides the failure

of rain one chief cause of distress was what has already been noticed, the change in Poona; the stopping of the old flow of expenditure and the closing of the large numbers of openings connected with the court and with the army and the decline in the old demand for the produce of the city craftsmen. [Capt. Robertson, Feb. 1825, Bom. Gov, Rev. Rec. 117 of 1825, 473-476, 531 534]

Towards the end of June 1825 Bishop Heber travelled from the Konkan by the Bor pass to Poona. He noticed an excellent bridge of thirteen arches which had just been finished over swampy ground near Karli, simple but extremely solid and judicious. [Heber's Narrative, III, 114.] In the west the cottages were small and mean with steep thatched roofs and very low side-walls of loose stones and there was a general appearance of poverty in the dress and the field tools. Still the cattle were larger and better bred than those of Bengal and these in better ease than might have been expected after the long drought which in the eastern districts had amounted to famine with its dreadful attendant evils of pestilence and the weakening of moral ties. Heber's Narrative, III. 110, 121. Making due allowance for the drought and scarcity of several years Poona in 1825 seemed to thrive under its present system of government. The burdens of the peasants were decidedly less in amount and were collected in a less oppressive manner than under the old monarchy. The English name was popular with all but those who were inevitably losers by their coming, the courtiers of the Peshwa, such traders as lived by the splendour of his court, and, though this does not appear, the Brahmans. The body of the people were very peaceable and simple, of frugal habits and gentle disposition. Perhaps in no part of India was crime so rare. [Heber's Narrative, III. 121 -122. The share of the produce taken by Government was said to be high, at least one-fifth. Government wished to introduce a permanent settlement but said that until they had a fuller knowledge of the country they should run the risk of doing greater injustice and occasionally greater evils by the change than any they could apprehend from the present system. [Heber's Narrative, III. 122-123.]

1825-26

In November 1825 *bajri* was selling at about 26 pounds (13 *shers*) and *jvari* at about 32 pounds (16 *shers*) the rupee. [The Collector, 17th Nov. 1826, Bom. Gov. Rev. Rec. 175 of 1827, 8-9.] Compared with the famine year of 1824-25 the realizable land revenue for 1825-26 showed an increase from £29,203 (Rs. 2,92,030) to £70,132 (Rs. 7,01,320), and the total realizable revenue including miscellaneous

customs and other items, from £56,623 (Rs. 5,66,230) to £101,911 (Rs.10,19,110). Of £70,132 (Rs. 7,01,320) the land revenue for 1825-26, £60,860 (Rs. 6,08,600) were collected and £9272 (Rs. 92,720) left outstanding. Of the total revenue for collection £90,065 (Rs. 9,00,650) were collected and £11846 (Rs. 1,18,460) left outstanding. [Bom. Gov. Rev. Rec. 175 of 1827,2-3.] In August 1827 Government authorized the Collector to grant remissions in his district for 1825-26 to the amount of £5987 (Rs. 59,870) and to write off £14,762 (Rs. 1,47,620)as an irrecoverable balance in 1823-24 and £7414 (Rs. 74,140) as an irrecoverable balance in 1824-25. [Gov. Letter 1556 of 27th August 1827, Bom. Gov. Rev. Rec. 175 of 1827, 75.]

1826-27.

In November 1826 the Collector wrote, 'For two more years the people will continue to be crippled by their losses in 1823-24 and 1824-25. Government must submit to grant them liberal consideration for some time to come. The scarcity of cattle is still considerable, and those who require cattle have not money enough to buy them at the present high rates. Time and indulgence can alone remedy these misfortunes. [Bom. Gov. Rev. Ree. 175 of 1827, 8-9.]

The rains of 1826 were moderate and partial. In some places the fall was favourable, and the outturn large; in other places one sowing and in a few instances two sowings failed. The early harvest was fair, but the late crops which promised well were greatly injured by a blight. [The Collector, 10th August 1827, Bom. Gov. Rev. Rec. 174 of 1827, 403-405.] Still the season was on the whole above the average. Bajri fell to about 52 pounds (26 shers) and jvari to about 64 pounds (32 shers) the rupee, [Bom. Gov. Rev. Rec. 175 of 1827, 8-9.] and the state of the people was greatly improved. They had replaced the bulk of their cattle and in the rains of 1827 were able to undertake their field labours briskly and with confidence. Aware of the efforts the people were making to stock their farms, the Collector granted liberal remissions wherever there had been a failure of crops. The Collector, 10th August 1827, Bom. Gov. Rev. Rec. 174 of 1827, 403-405.] Compared with 1825-26 the land revenue for collection for 1826-27 showed a decrease from £115,472 (Rs. 11,54,720) to £111,019 (Rs. 11,10,190), and the total revenue for collection including miscellaneous customs and other items a decrease from £156,697 to £153,039 (Rs. 15,66,970-Rs. 15,30,390). [These figures include the four sub-divisions of Sholapur, Mohol, Indi, and Muddebihal, Bom. Gov. Rev. Rec. 174 of 1827, 403, 409-411.]

The season of 1827 began favourably. Writing in August the Collector says, 'Another season such as this promises to be will restore the people to the state of comparative well being which they enjoyed before the bad years of 1823 and 1824. The Collector, 10th August 1827, Bom. Gov. Rev. Rec. 174 of 1827, 403-405.] Later on the prospects of the year became overcast. The season on the whole was bad. In many sub-divisions there was little rain and in many others promising crops were ruined by excessive moisture. Compared with 1826-27 the land revenue settlement for 1827-28 showed a decrease from £131,185 (Rs. 13,11,850) to£125,562 (Rs. 12,55,620), and remissions showed an increase from £20,166 (Rs. 2,01,660) to £37,971 (Rs. 3,79,710). [Bom. Gov. Rev. Rec. 212 of 1828, 222-224.] The failure of crops and distress were specially great in Indapur. Many of the people in despair had left their homes. In spite of the liberal terms offered by Government there seemed no improvement. Everywhere in Indapur were signs of desolation. In other parts of the district as well as in Indapur the bulk of the husbandmen were completely in the hands of the moneyleaders or savkars, who, and not the people, reaped any profit which accompanied high grain prices in bad seasons. [Mr. Richard Mills, Collector, 23rd September 1828, Bom. Gov. Rev. Rec. 212 of 1828, 225-228.]

1828-29.

The year 1828-29 was a season of partial failure chiefly in Bhimthadi and Purandhar. [Bom. Gov. Rev. Rec. 352 of 1831,102, 103, 109, 113.]

Revenue System, 1828-29.

Of the system of settling the revenue which was in use in 1828 the Collector Mr. Blair has recorded the following detailed account. [Mr. Blair, Collector, 643 of 9th December 1828.] Early in the season (October and before November 15th) the mamlatdars start on tour round their sub-divisions to ascertain what land in each village is under tillage. When the mamlatdar reaches a village, he summons the landholders, and, in the presence of the village officers, inquires and records the area which each holder has taken for the early tillage or agrees to take for the late harvest. If in consequence of disputes the tillage of any village is declining, the mamlatdar settles the disputes, and, if the cause of the decline is the poverty of the people, he gives advances. In November when the early harvest is ripening the

mamlatdar makes a second tour round his charge to see the condition of the crops and ascertain whether the actual area under tillage is more or less than the holders engaged to take. The Collector generally receives the mamlatdars' reports in December when the early crops are being reaped and the late crops are well advanced. When all the mamlatdars' reports have been received, the Collector and his establishment or huzur kacheri start through the district. On reaching a sub-division the Collector calls the landholders to appear before him at two or three convenient places according to the size of the subdivision. The first business is to ascertain how far the cultivation and the state of the crops correspond with the mamlatdar's accounts. This is ascertained by comparing the accounts of the mamlatdar's clerk or shekhdar with the reports of the village officers and villagers and every here and there by an actual examination of crops. If the cultivation is the same as in the last year and no failure has occurred among the landholders, rents remain unchanged. In case of an increase or a decrease the amount is either added to or taken from the former total. When the area of land under tillage and the whole rent due by the village have been ascertained, a mauzevar patta or village deed is given to each headman and registered by the village clerk, showing the full amount of rent to be paid by the village. When in this way every village in a sub-division has been settled, the kulvar or personal settlement with the individual landholder is begun. This individual settlement is carried out by the Collector and his establishment with the help of the mamlatdar who calls together the landholders of four or five of the nearest villages, ascertains the area of land held by each man and its rent and gives each landholder a deed or patta signed by the Collector. In this deed every field which each man holds and its rent for the year is entered. In many villages the greater part of the people hold the same fields for several years; as a rule in not more than one-fifth of the cases is a change required. When the Collector has finished the first four or five villages, he moves a few miles, summons the landholders, and settles their rents; and goes on moving from place to place till he has finished the sub-division. The practice of first fixing the whole sum due by each village greatly reduced the labours of making the individual settlement. The village officers knowing that a certain sum was to be levied from their village, except perhaps in the case of a few of their own relations gave every assistance to make a fair distribution among the land-holders, and, for the same reason, the people agreed without much difficulty to their shares. As the discovery of every case in which land was fraudulently held rent-free, reduced the share of all other holders, a regard for their own interests encouraged the people to give information of many frauds. It was also of advantage to fix the individual assessment as

late in the year as possible as the actual outturn of each man's crops could then be known. Mr. Blair ends his account with the remark that the system undoubtedly acted as a tax on industry as each man had to pay according to the character of his crops. The only remedy seemed to be to introduce a survey under which each man would pay according to the quantity and quality of his land and not according to the outturn of his crop. In the individual settlement much was left to the agency of native servants. This agency could not be dispensed with. When properly controlled, no serious evil resulted from its employment, and the minute process that was gone through every year made the most trifling abuse liable to detection. [Mr. Blair, Collector, 643 of 9th December 1828.]

MR. PRINGLE'S SURVEY SETTLEMENT, 1829.1831.

About 1825 Mr. Pringle the assistant collector of Poona was appointed to survey the district and revise the assessment. [In 1826-27 the revenue survey was in progress in the Poona district. Bom. Gov. Rev. Rec. 174 of 1827, 408. Mr. Pringle finished the survey and assessment of Shivner or Junnar, Pabal and Indapur, and reported the result to Government in September 1828. [Mr. Pringle's Report (Lithographed) dated 6th September 1828, about Junnar pabal and Indapur. In the principle he adopted for framing his assessment, in one material respect Mr. Pringle departed from the principle followed by Sir Thomas Munro in the ceded districts of Madras, and, so far as Mr. Pringle was aware, from most other settlements hitherto undertaken either under Native or European Governments. From time immemorial the foundation of the land tax: in India had been a share of the gross produce of the soil. The proportion varied at different times and under different rulers, but the principle was always the same. The principle of a share in the gross produce is found in the institutes of Mann and in the precepts of the Hedaya, and in the theory if not in the practice of every government which has attempted to methodize the assessment by fixed rules. It was the principle professed by Akbar's minister Todar Mal in Hindustan (1560-1600) and by Malik Ambar (1600-1626) and it was that also adopted in the ceded districts of Madras where it was the declared opinion of Sir Thomas Munro, an opinion in which he has been followed by almost all succeeding revenue authorities, that the exaction of one-third of the gross produce by government would be sufficiently moderate to enable every landholder to derive a rent from the land he cultivated. Mr. Pringle, 6th September 1828 para 5. In Mr. Pringle's opinion the proportion of the gross produce which could be exacted without absorbing the whole of the rent, varied with the numbers, wealth, and

skill of the people. Mr. Pringle thought that it was not unlikely that at the time when Sir Thomas Munro wrote, two-thirds of the produce may have been a sufficiently large share to leave to the landholders of the ceded districts as rent. At the same time Mr. Pringle thought that it could hardly have escaped Sir Thomas Munro's attention that while an assessment of one-third of the gross produce might leave a sufficiency to the holder of land whose net produce equalled half of its gross produce, it must exclude from cultivation soil whose net produce is only a fifth of its gross produce. In Mr. Pringle's opinion the surplus which remained from the gross produce after deducting all tillage expenses, was the only fair measure of the power of land to pay an assessment. At the same time, as the relation of the surplus to the whole produce varies in different soils, any tax proportioned to the gross produce must be unequal to the extent of the variation between the net produce and the whole produce, and this inequality by creating an artificial monopoly in favour of the best soils, would tend to check production and to take more from the whole body of the people than it brought into the treasury. He thought that by proportioning the assessment to the net produce, and keeping that proportion moderate, the productive powers of the country would be preserved intact and land would become valuable. Mr. Pringle, 6th September 1828 paras 7, 40.1 On these considerations Mr. Pringle held that in every case his assessment should rest on the net produce of the land, and that, whatever might be the difficulties, all his inquiries should be directed to find out the amount of the net produce. He accordingly made it his first object to class all soils as nearly as possible according to their net produce, that is the portion of the money value of the average gross produce which remains after deducting the whole cost of tillage and other accompanying charges. To determine the amount of the net produce Mr. Pringle appointed assessors and took the evidence of intelligent landholders. The lands were first arranged according to their quality in classes, varying in number with the varieties of soil in each village, but seldom exceeding nine in dry land and three or four in garden and rice land. When more than one variety of soil occurred in the same field, the field was classed according to its average quality. The lands were classed under the advice and with the help of the landholders themselves whose local knowledge made them the best judges of the relative powers of the different fields in their own village. At the same time the assessor availed himself of the opposite interests of the holders, and the experience derived from other villages, to prevent unfairness or partiality. When the classing was completed, the assessor proceeded to observe and record the distinguishing characteristic of each class. Next, from the evidence of the most experienced and intelligent landholders, he ascertained what crops

were usually grown in each field, the most approved rotation of crops, the average amount of produce in ordinary years, and the several items of expense incurred according to the system of cultivation usually adopted by landholders in middling circumstances. In tracing each item of expense no point, however small, was omitted which might appear likely to contribute to the accuracy of the result. When circumstances admitted it, the evidence in regard to the amount of produce was verified by cutting crops in different soils and comparing their outturn with the alleged produce of land in similar villages. In all estimates either of produce or of cost where grain was turned into money, the change was made at the average price of grain during a series of twenty years taken from the books of the village Vani. If accounts for twenty years were not available, the average for the whole period was fixed on the proportion which the prices in the years for which they were procurable, bore to the prices during the same years in the nearest market village. In the few villages where there was no Vani the prices were taken from the nearest village where there was a Vani, and if the distance was considerable, an allowance was made for the cost of transport and duty. In fixing the average prices care was taken to avoid relative inaccuracies in the prices of different villages by making all the extracts for the same years and months and by examining and comparing the local weights and measures. In computing the cost of cultivation the number of bullocks required to till each kind of soil was ascertained by an estimate of their daily work, and the yearly acre charge was calculated with reference to their food, their ordinary price in the neighbouring markets, the interest on their original cost, the number of years for which they usually lasted, and the cost of insurance against casualties. The acre cost of manual labour was in like manner fixed with reference to the number of hands required to cultivate a given quantity of land, and their wages in money and necessaries at the current rate of hire in the village. The same minuteness was observed in calculating the cost of seed, of manure, of field tools, of craftsmen's and other village fees, of the usual sacrifices and offerings, in short of every item of labour or stock which could form a charge on the produce before it was brought to market. Interest at the current rate exacted on fair security was calculated on all advances which did not yield an immediate return and in all cases of risk a fair allowance was made for insurance. All these items, together with the reasons and authorities on which the estimate rested were ascertained and recorded by the assessor in the fullest detail in each class of soil in every village. The difference between the money value of the gross produce and the cost of cultivation in each class formed a standard by which its power of paying assessment was brought into comparison with the rent-paying power of any other part

of the country. When the measure of relative assessment was determined, the next process was to fix the actual assessment. This actual assessment was fixed on the basis of past collections. The assessor secured the revenue accounts of the village for as many years as possible and ascertained the area of assessable land in bighas or other local measure, which was cultivated in each year, and the amount of money collected on it. As the local measures Varied in area in almost every field, the next step was to turn them into acres. The local measures were easily turned to acres where the accounts had been kept in detail, as the names of the fields actually in cultivation in each year were given and their size could be known from the present survey. Where as was much oftener the case the old accounts did not give the names of the fields, only an approximate estimate of the area could be made. To make this approximate estimate of area it was assumed that in cultivation preference was generally given to the better classes of land, and the average number of bighas to each acre in each class having been ascertained from the survey, the number of bighas cultivated in any particular year was converted into acres at that proportion, beginning with the highest class, and descending through the other classes until the whole recorded cultivation was accounted for. In applying the recorded amount of assessment to the area of cultivated land, all cesses and payments of every description, excepting fees to village craftsmen which were already dednoted in the charges, were included in the rental or jama. No allowance was made for remissions on account of individual poverty nor were detached cases of leasehold or kauli land and its assessment taken into account, because these had reference to temporary and partial considerations which ought not to influence the general conclusions. When the number of acres cultivated in each year and the amount of assessment were ascertained before any final inference could be deduced, the quality of the land under tillage had to be ascertained. In former assessments the necessity of ascertaining the quality of the land had been overlooked. Formerly the average of past collections from cultivated land had without limitation been taken as a guide for the future, though it was obvious that the rate levied from the cultivated portion which was generally the best in the village, if applied indiscriminately to the whole land, must often be more than it was capable of paying. In order to avoid this mistake the cultivated land in each year was arranged in the classes fixed by the survey either where that was possible by ascertaining the fields actually cultivated or, if the actual fields could not be ascertained, by assuming that a preference had been given to each class of land in proportion to its inherent value. When the whole land was so arranged, it was reduced to the standard of the first class by allowing a deduction in the nominal

number of acres in each class in proportion to the amount by which its qualities fell short of the qualities of the best class. Thus where there were twenty acres of the second class cultivated and the proportion of the net acre produce in the class was about half of the first class, the twenty acres were rated in the estimate as ten acres. The number of acres cultivated in each year being thus estimated in land of the best quality, their sum, divided by the recorded amount of collections, gave the acre rate in such land for that year, and the average rate for the whole series of years was the rate of assessment on the best land of the village as fixed from past collections. When this rate was adjusted to each of the inferior classes of land in the proportion of its net produce, it accurately showed the rates for those classes with reference to the same data. When the assessor had gone through all of these calculations and the result was fully recorded along with the authorities on which the result was based, his share in fixing the rates was completed. It only remained for him to arrange and prepare the general registers of tenures and land divisions which were required for the full development of the system in detail. The effect of the assessor's operations was, in proportion to their net produce, to distribute over the whole lands of each village the average amount of its former payments. The work then passed to the head assessor whose business was to examine and check the operations of the assessor and to compare and combine them with those of other assessors in other villages. With this view the classification was inspected and the complaints of the landholders, if there were any complaints, were heard and investigated. A close scrutiny was instituted into the detailed estimates of gross produce and cost of tillage, and also into the rates of assessment drawn from past collections with all the reasons, records, evidences, and authorities, on which each estimate was based. This inquiry was carried on with particular care in cases where the proportion of the rate of past Collections to the net produce compared with the proportion in other villages and with the actual condition of the village itself gave reasons to suspect inaccuracies. When the proportions did not agree, the apparent error had to be traced to its source and the inconsistency either explained or rectified. When the work of the assessor had been examined and found satisfactory, it was confirmed by the head assessor. As soon as the accounts of all the villages in one or more groups were completed, the head assessors proceeded to combine and generalize the results with the object of equalizing the rates of assessment in different villages, which, as they had hitherto been calculated independently in each village from its past payments and these were liable to be affected by a variety of accidents, were frequently very unequal. In the operation of equalizing the rates the

head assessor performed for the villages of a group what the assessor had performed for the fields of each village. He distributed among them in the proportion of their net produce the total average amount ascertained to have been realized from the whole. This was effected by calculating the amount of net produce and assessment of all the land in the group at the rates fixed for each village by the assessors. The amount of net produce divided by the assessment gave the average proportion of the assessment to the net produce in the whole group. This being applied to each class of land in every village, determined the accurate rate of assessment for that class, with reference to the rest of the land in the same group and to the past payments of the whole. All proceedings of the assessors and head assessors were revised in Mr. Pringle's office with as much care and attention as the minuteness of detail and the variety of matter allowed. The mode in which the general principles had been followed was inquired into. The information collected and the facts observed and recorded under similar circumstances were compared. The value of the evidence, the authenticity of the accounts and the reasons for the several operations were weighed and considered. The complaints of the holders were heard and investigated, and, where necessary, the fields were inspected. If in the conrse of these inquiries any important error was detected, it was corrected. When the accounts had undergone this final revision, Mr. Fringle compared the proportion of the rate of assessment to the net produce with that in other groups. He invited the opinions of the hereditary district officers and of others who were either acquainted with the past and present revenue administration or whose opinion was worthy of respect from their general information and intelligence. Mr. Pringla procured such information as he could in regard to the former history and present resources of the group or pargana, and, on a Consideration of these points and of the general changes in the country, he determined to confirm the settlement of the head assessors or to raise or to lower it as circumstances suggested. If the assessors' rates were either raised or lowered, the change was made by the increase or deduction of a uniform proportion of all the rates.

The available sub-divisional details of this survey and assessment are given below. The Battlement was introduced in Shivner now Jnnnar, Pabal, Indapur, Bhimthadi, Purandhar, and Khed in 1829.30, and in Haveli and Maval in 1830-31. It caused a reduction of 11½ per cent in Junnar and Pabal, and 25½ per cent in Khed; and an increase of 76½ per cent in Indapur, 13¼ per cent in Bhimthadi, and 27½ per cent in Purandhar. No information is available regarding the effect of Mr. Pringle's survey in Haveli and in Maval.

The Shivner or Juanar sub-division was the most northern in the district. It stretched from the Sahyadris about forty miles east with an average breadth of about fifteen miles. The west was hilly and rugged, crossed by valleys running between the east-stretching hills. Towards the east and south the country became more level, and, in the Ala and Bela groups, opened into broad plains. Along the north a range of hills ran inland, and beyond the hills the limits of the sub-division spread over a rough and bushy country, till it joined the Ahmadnagar Collectorate in the valley of the Mula. Junnar contained 178 Government and thirteen alienated villages. Exclusive of hills and rivers the measured area of the Government villages was 336,408 acres. The soil was in general good and well tilled. In the valleys near the Sahyadris, where the supply of rain was abundant, rice, nachni, khurasni, sava, and other hill grains were grown, and in the eastern plains good millet and hulga crops were raised in the lighter soils mixed with pulse as rotation crops in the best land. The most valuable produce was wheat and gram of which very fine fields were grown especially near Umraz and Otur where the soil was perhaps about the best in the Deccan. The land was usually worked with a four or a six bullock plough, which in the best soil was used only once in two or three years, the harrow being employed in the intermediate seasons. The inferior soils were ploughed every year. Manure was applied liberally to the best but not to the poor lands. 1473 acres of garden crops were watered from wells. In general the profit from garden tillage was not high and from want of capital some of the gardens had fallen to ruin. Near the town of Junnar were some valuable plantain and vegetable gardens whose produce found a ready sale in the Junnar market. These Junnar gardens had hitherto paid an acre rent of £4 (Rs. 40), the highest rent Mr. Pringle knew of in the Deccan. But they had been rather over-assessed. No land was watered from ponds in Junnar and none of any consequence from rivers except in Narayangaon where a fine lately repaired dam watered 415 acres of the best garden land. In the western valleys the rice depended on the rainfall which was generally certain and plentiful. The acre outturn was large compared with the produce of the dry lands but the cost of tillage was heavy as the work was chiefly done by hired labour. In the open villages near the west in ordinary seasons the supply of rain was sufficient, but in the eastern plain the supply was precarious and the villages were less flourishing. There were no large towns. Junnar, Narayangaon, and Otur were the places of most note, but none of them had over 8000 people. The local demand for produce was trifling, the greater part of the harvest went to Poona or occasionally to

Bombay. The village records showed in Government villages 6457 landholders, but the actual number of holders was greater as fields were sometimes held jointly. Of the whole number entered in the accounts, 4846 were hereditary holders or mirasdars and 1611 were casual holders or *upris*. In no part of the Deccan were the rights attending the hereditary tenure or *miras* more distinctly recognized. Almost every village had deeds of sale and mortgage, generally of old date, and when the land was valuable it was occasionally the subject of contest. Mr. Pringle, 1828, para 50. In the three subdivisions Junnar Pabal and Khed the greater proportion of the landholders were mirasdars attached to the soil. The Collector, 4th Sept. 1830, Bom. Gov. Rev. Rec. 352 of 1831, 125. In the Open east the husbandmen were chiefly Maratha Kunbis, and in the West Kolis. The Kunbis were the more intelligent, but their hardy simple habits fitted the Kolis for the work of tilling the hilly and rainy west. In the richer villages land was sometimes held on mortgage by Brahmans and traders who tilled them either by hired labour or by arranging to have a Kunbi as managing partner. Of late years such speculations had become less frequent, it was said, because profits had decreased.

Pabal, 1828.

The Pabal subdivision lay close to the south of Junnar. Its lands did not pass so far west as the Sahyadris, where, and to the south it was bounded by Khed and to the east by Ahmadnagar. In produce, style of tillage, water, markets, people, and tenures Pabal closely resembled the open parts of Junnar. The chief points of difference were that the land was not so rich and that the proportion of late or *rabi* crops was smaller. The richest villages were to the north-west in the Mhalunga group. To the south-east also the land was good but the supply of rain was uncertain, and much distress had been suffered and much land had fallen waste in the recent unfavourable seasons. There were fifty-four Government and eleven alienated villages. The Government villages included 184,896 acres with 3249 landholders of whom 2397 were hereditary and 852 were casual.

Shivner-Pabal.

Except parts of the hilly west Shivner and Pabal had formerly been included in the district or *subha* of Junnar, which, from its cession by the Moghals in 1720 until the latter years of Bajirav's government (1817), was for long periods entrusted to the same managers or *subhedars*. One of these officers Hari Damodar had remained in charge for forty-five years. The subordinate managers of village groups or

tarafa were also appointed under head-quarter deeds or huzur sanads and were continued during good behaviour. Their local knowledge and experience made them so useful both to the government and to the people that they were rarely removed, and at one time had almost the character of hereditary officers. West Shivner was later of coming to the Marathas. It formed what was termed the taluka of Shivner most of whose revenues were assigned for the maintenance of the local hillforts and garrisons. Like the more eastern parts these villages had been managed by the same officers during long periods. Under the Marathas before the time of Bajirav, subordinate agents called havaldara or men in charge, agreed to pay the head manager or subhedar a lump sum for a group of villages and made a detailed settlement either with the heads of villages or with individul holders. Hereditary holders or *mirasdars* paid full or *sosti rates*, and casual holders or upris paid short or ukti rates. When the settlement was made in a lamp sum with the village head, what fell short on the lands of the casual holders was made good by an extra levy on the lands of the hereditary holders. As they were seldom closely examined, the group manager or havaldar was generally able to protect himself by showing in his returns something less than the actual area of full rent or sosti land. Though under this system much of what was taken from the people never reached government, the country was on the whole well tilled and the people were much more flourishing than at later periods when the assessment was more moderate. The long terms during which men remained in charge of districts and of village groups, made them interested in the prosperity of their villages. They occasionally united the character of banker with that of revenue manager and were liberal in their advances and loans, and, on the credit of their long-continued position as managers, in bad seasons they were able to raise funds to meet the demands of the district manager or *subhedar* without pressing the landholders. In this way by working together with the landholders and by keeping their accounts open for a series of years, the group managers were able to make good their advances at the time when extra payments were least burdensome to the people. This system continued with little change until the accession of Bajirav in 1796. Under Bajirav the old managers were removed on the slightest ground and other evil changes were introduced. Then followed in 1802 the irruption of Yashvantray Holkar which caused desolation in Junnar, though the ruin was not so complete as in some other parts of the Deccan. After the restoration of Bajirav by the treaty of Bassein, attempts were made to return to a better plan of government, but these attempts were soon abandoned for the ruinous system of revenue contracting.

When the British assumed the management of the country Junnar and Pabal were at first included in Ahmadnagar. Pabal was soon transferred to Poona, but till 1821 Junnar remained in Nagar. In Junnar at- in most of Ahmadnagar an important change was made in the rent settlement or *jamabandi* of 1819. The whole of the land which had hitherto been reckoned in local measures, differing in name and extent in almost every village, was nominally turned into bighas and arranged in classes on hasty and inaccurate information. Without much inquiry as to how far it had been actually realized, the full or kamal rental was adopted as the maximum of assessment in each village, and apportioned among the different classes at rates apparently not less arbitrary than the classification. When the increase in the total amount was- considerable, it was imposed gradually by progressive or *istava* enhancements. The results of this settlement were far from uniform. But under the loose way in which it was carried out, the people in many cases were able to procure land under easy terms; and the new rates, seemed to have been paid without much difficulty. In Pabal and the, other sub-divisions which were attached to Poona soon after the British acquisition, the full or *sosti* rates and the short or *ukti* rates of the former government remained undisturbed. The only changes were that greater indulgence was sometimes shown in allowing hereditary holders to pay short or *ukti* rates. On the other hand the assessment of waste land was occasionally enforced with more rigour than formerly. Though it was not without objections, this system probably worked better than any crude attempt at reform would have worked. [Mr. Pringle. 6th September 1828 para 61.]

In settling Junnar and Pabal, their neighbourhood and their similar circumstances induced Mr. Pringle to regulate the assessment by the same general standard. The principles on which the assessment was framed have been explained. As it was the first attempt to apply those principles, the settlement was interrupted by many doubts, difficulties, and errors; many groups had to be revised twice or even three times. The share of the net produce which it was decided should be taken by Government was 61.75 per cent. When the assessment was completed the people were called and the result was explained to them. It was found that in some villages the new rates exceeded and in others fell short of former payments. The same happened in the case of individuals. Where the result was an increase the parties were naturally dissatisfied. They were asked to state their objections, and a reference to the detailed accounts and to the opinion of their neighbours was made to show them that their rents had been raised because their land was found to be of greater extent or of better quality than had been supposed. If they refused to admit the justice of

the enhancement they were called on to point out any other holder whose fields they considered as good as their own and who had obtained more favourable terms. If they pointed out a more favourable case, a fresh investigation was made on the spot with the help of the headmen of neighbouring villages. These inquiries sometimes led to a reduction of the estimate of net produce, but they more frequently confirmed the assessor's work.

On comparing the details of the new and of the former assessment Mr. Pringle found that a frequent, though not a uniform, effect had been the reduction of the rent of the more fertile fields and villages and the increase of those of inferior quality. This, which to Mr. Pringle must have been an unexpected and disappointing result, was he thought due to the working of full rates or sosti and short rates or ukti, as in many cases under that system, while the best lands paid very highly, the poorer lands paid little more than guit-rents. When the landholders' complaints had been heard, and the settlement of the head assessors had as far as possible been equalised, it remained to confirm raise or lower their settlement in such uniform proportion as appeared advisable. Before fixing how far to change the assessor's settlement Mr. Pringle had to consider a case which in his opinion constituted a special exception to the general principle. The case was this. The western valley or the khore of Madh was held chiefly by Kolis, a simple rude and hardy people with few ties to bind them to the soil, at the prompting of pique or of disgust always ready to take to their favourite pastime of freebooting. Probably to keep the Kolis settled their lands had been held on very favourable terms. The general effect of the new assessment would in some cases have more than doubled the Kolis' rates. This was no more than the fertility of the soil justified, and as most of the Kolis were casual holders or upris they had no claim of right to any special indulgence; still Mr. Pringle considered that in the case of men of this class the recovery of the full rental was less important than keeping them settled and guiet. Accordingly in the villages where the increase would have been heavy and in one or two similar villages in neighbouring valleys, Mr. Pringle made a reduction of twenty per cent on the survey rental before bringing them into comparison with the rest of the country.

The amount of land assessment in Junnar and Pabal fixed by the head assessors on the basis of past collections was £47,980 (Rs. 4,79,800). As the accounts of former management had been found very complete and as they went back to some of the best periods of Maratha government, general considerations, connected with the altered circumstances of the country, induced Mr. Pringle to consider this

amount greater than could be easily realized, consistently with a liberal regard for the welfare of the people. He accordingly made a general reduction which together with the special reduction in the Koli lands, and, with revisions in some cases where the calculations of the net produce had been excessive, amounted to a reduction of 14.012 per cent on the assessor's total rental. This brought the final assessment to £41,257 (Rs. 4,12,570) and the proportion on the net produce to 54.03 per cent. Of 2460 wells in both sub-divisions only 237 were capable of yielding rent and of these the assessment on the principles laid down in Government letter dated 12th October 1826 amounted to £265 (Rs. 2650). But the whole of this did not fall due until the periods of exemption had expired. The details are: [Mr. Pringle, 6th September 1828 para 72. There were 119,820 acres of unarable land and 2223 wells paying no rent. Though entered under Tilled, the alienated acres and their rental are totals whose detail as to tilled and untitled is not given in Mr. Pringle's report. The rupees shown in the statement are ankushi rupees one of which was equal to 0.958 of a British rupee. See Bom. Gov. Sel. LXX. 12.]

SHIVNER-PABAL SETTLEMENT, 1828.

| LAND. | TILLED. | | WASTE. | | WELLS. | |
|------------|---------|----------|---------|----------|--------|-------|
| LAND. | Area. | Rent | Area. | Rent. | Number | Rent. |
| | Acres. | Rs. | Acres. | Rs. | | Rs. |
| Government | 230,645 | 2,70,829 | 139,148 | 1,05,133 | 237 | 2655 |
| Alienated | 30,095 | 36,610 | | | 216 | 3468 |

Under this settlement the assessment of Government land exceeded Malik Ambar's total or tankha by £5843 (Rs. 58,430) and was £6119 (Rs. 61,190) less than the average of past collections. In each village the tillage area was entered for the year in which the village was surveyed. These amounted in the Government land to 230,645 acres of which the survey assessment was £27,083 (Rs. 2,70,830) which was £3564 (Rs. 35,640) less than the existing or actual rent-settlement or jamabandi. An increase in the well receipts reduced the deficiency to £3343 (Rs. 33,430). [Mr. Pringle, 6th September 1828 para 73.]

Indapur, 1828.

Indapur lay between the Nira and Bhima which met at its south-east corner. It contained eighty-six villages of which ten were wholly alienated and were not surveyed. The seventy-six villages which were either entirely or partially in the possession of Government, covered 306,767 acres exclusive of hills. The soil in the river-bank villages was in general deep and rich. The uplands between the rivers were barren and stony. The chief produce was white *jvari*. The proportion of waste was not very great, but the cultivated area bore marks of the landholder's poverty and want of capital. The heavy eight-bullock plough was used every year in the deep soils. Manure was seldom given except to watered lands. It was its proverbially scanty supply of rain that made Indapur the most unprodutive sub-division of Poona. The only watering was from wells, and the area watered from wells was small.

During Maratha rule Indapur is said to have flourished most under the management of Madhavrav (1761-1772) and of Nana Fadnavis (1774-1796). At that time most of the sub-division was assigned for the support of pagekaris that is commandants of horse and shiledars that is self-horsed troopers of whom considerable bodies were stationed in all the chief villages, probably to guard the Nizam's frontier. The few records which remained showed that, at that time, compared with what it afterwards became, the area under tillage was great, the rates were high, and there was a much larger body of hereditary holders. The decline of Indapur dated from 1794. A succession of bad seasons and misgovernment reduced its resources and its ruin was completed in 1802 by the ravages of a detachment of Holkar's army under Fatesing Mane. The ruin caused by this army was followed by the failure of the late rains of 1803 and a famine so grievous that the whole of the people left their villages. For six years the land remained empty. It was then granted on a favourable lease to one Malhar Mukund. The lease lasted for nine years, and, at the end of the nine years, the demand was limited to Malik Ambar's very moderate assessment. At the beginning of British management its state was comparatively prosperous, except that the hereditary holders who had fled in the time of desolation, had never come back to claim their lands. From the almost total destruction of village records about 1803 and the irregular system that had since prevailed, little information was available regarding the principles on which the assessment was regulated in the best times. Such accounts as were forthcoming seemed to show that the land had been held on full or soati and On short or *ukti* rates in much the same way as in Shivner and Pabal.

When Indapur came under British management, it was at first placed under the Collector of Ahmadnagar. The rent settlement of 1819 was made by his establishment on the plan adopted in Junnar. In Indapur the full Maratha settlement or kamal which was intro-duce'd as the maximum to which by gradual enhancements the Government demand was to rise, was so greatly in excess of the usual collections that it could not have been continued. For three years as the rates were moderate, crops good, and prices high, Indapur flourished. But low grain prices in 1822 and 1823, and an almost complete failure of rain in 1823 and 1824 reduced the people to the extremest poverty. In 1826 the Collector of Poena, endeavoured to restore cultivation by granting village leases for five years on rents rising to twenty-five per cent over Malik Ambar's assessment or tankha. The terms were moderate. But such was the scarcity both of people and of capital that few men were found willing to undertake the risk, and of those who took leases, in consequence of the want of rain in 1826-27, the greater number failed to pay even the moderate sums required. The system of leases was abandoned and the lands were given to people on such short or *ukti* rents as they were willing to pay. [Mr. Pringle, 6th September 1828 paras 79-80. Mr. Giberne, Collector, 4th September 1830, Bom. Gov. Rev. Rec. 352 of 1831, 115-119.] Indapur was the largest town in the sub-division. It had once been a place of importance. But in 1828 its trade was inconsiderable and its only manufacture was the weaving of coarse cloth for the use of the neighbouring villagers. The grain went chiefly to Phaltan and Baramati and from there to the Konkan and Poona. Of the husbandmen only a very small proportion were hereditary holders and these were chiefly of headmen's families. Few others had survived the wars and famines which had laid Indapur waste. The casual holders or *upris* for the most part belonged to the neighbouring territories of the Nizam and the Raja of Satara, or they had come from higher assessed British lands attracted by low rates but without any permanent interest in the soil. The villages were ruinous, and, when Mr. Pringle visited them, had become half empty or entirely deserted in consequence of a recent (1827) failure of rain. Mr. Pringle, 6th September 1828 para 74.

As the assessing of Indapur was begun later than the assessing of Junnar and Pabal, Mr. Pringle's experience enabled him to clear many of the assessors' doubts and to correct many of their errors. Still several delays occurred and there was much to put in order and to correct, which required the constant supervision of Mr. Pringle and his establishment. The materials for the assessment were more scanty than they had been in Junnar and Pabal. The old records were less complete; many of the holders were absent, and, of those who

attended, many were new-comers or casual residents who took little interest in the survey. While the work was in progress, Mr. Pringle visited almost every village in the sub-division unaccompanied by any of his establishment and encouraged the people to give him their opinion regarding the survey. Some of the more intelligent seemed sensible of the justice of the views with which it was undertaken, and in general were satisfied with the means which had been used to apportion the rates on the different fields. By far the greater number showed an apathy very different from the jealous anxiety of the hereditary holders of Junnar. A series of bad seasons had taken the heart out of the Indapur husbandmen. Provided they obtained present relief, they were willing to trust the future to the mercy end moderation of Government, aware that if Government asked more than they could pay, they could with little inconvenience move to some other part of the country where rents were lower. The assessors fixed twenty-five per cent of the net produce as the average of past collections. The extreme lowness of this rate was due to the fact that the papers from which it was calculated belonged to the years that followed the ruin of 1803 and included many years of specially light leases or kauls. It would have been impolitic to make a rate obtained under such circumstances permanent. Mr. Pringle had no hesitation in increasing it, but, as he thought that in estimating the gross produce the assessors had not made sufficient allowance for the precarious rainfall and as Indapur was much more impoverished than Junnar or Pabal, ho judged it inadvisable to raise the Indapur assessment to the Junnar standard. Under these circumstances he determined to increase the head assessor's settlement by 12½ per cent, a change which raised the Government demand to about 28% per cent of the net produce.

A due allowance for the uncertainty of the rain supply would probably raise the share to about 45 per cent or nine per cent less than the proportion finally fixed in Junnar and Pabal. When the head assessors had equalized and completed the assessment as in Junnar and Pabal, it was found to raise the payments 6i some holders and of some villages and to lower the payments of others. In this respect as in Junnar the new rates were found most often favourable to the best lands. Most of the villages on the Nira had their rates raised, while in the Bhima villages the rates were relatively reduced. This result appeared to be due to the fact that the area of land had hitherto been estimated much lower in the Nira than in the Bhima villages, though there was no corresponding difference in the quality of the soil. The results when explained to the holders were considered good or bad according as their effect was to lower or to raise their individual

payments. The doubts of all the villages which objected were, with a single exception, either removed or silenced by an explanation of the causes of the change or by a reference to the accounts and a comparison with the details of other villages. In the case of the single village which refused to accept the new rates, accompanied by the hereditary distriot officers and by the headmen of other villages, clerks from the Collector's office were sent to inspect the land. The inquiry confirmed the correctness of the assessors' rates. The total rental fixed by the head assessors on Government and alienated lands was £17,532 (Rs. 1,75,320) and the increase which Mr. Pringle imposed raised it to £19,723 (Rs. 1,97,230). The well-tax yielded an additional sum of £413 (Rs. 4130) that is a total of £20,136 (Rs. 2,01,360). The details are: [Mr. Pringle, 6th September 1828 para 89. There were 60,152 acres of unarable land and 444 wells paying no rent. Though entered under Tilled, the alienated acres and their rental are totals whose detail as to tilled and waste is not given in Mr. Pringle's report.]

INDAPUR SETTLEMENT, 1828.

| LAND | TILLED. | | WASTS. | | WELLM. | |
|------------|---------|---------|--------|--------|--------|-------|
| LAND. | Area. | Rent. | Area. | Rent. | Number | Rent. |
| | Acres. | Re. | Acres. | Rs. | | Rs. |
| Government | 168,765 | 142,156 | 63,474 | 43,481 | 237 | 3552 |
| Alienated | 14,376 | 11,595 | | | 35 | 578 |

The total settlement of £18,564 (Rs. 1,85,640) on Government land was £5987 (Rs. 59,870) above Malik Ambar's total or *tankha* and £5049 (Rs. 50,490) below the Maratha total or *kamal*, and £2068 (Rs. 20,680) more than that calculated from the average of past collections. The survey assessment of cultivated Government land exceeded the existing or actual settlement or *jamabandi* by £6168 (Rs. 61,680) or an increase of 76½ per cent. But, as Mr. Pringle says, this was of no importance when the circumstances under which the land was let at the time of survey were taken into consideration. [Mr. Pringle, 6th September 1828, para 90. 'The assessment of cultivated land exceeded the actual *jamabandi* by £6168 (Rs. 61,680). This the Superintendent considered of no importance as the land was let so low in former years, Mr. Giberne, Collector, 4th September 1830, Rom. GOV. Rev. Rec. 352 of 1831, 115-119.]

Bhimthadi.

In Bhimthadi the new survey and assessment raised the rates on cultivated land 13¼ per cent over the former settlement. [Mr. Giberne, Collector, 4th September 1830, Rev. Rec. 352 of 1831, 108-110.]

Purandhar.

In Purandhar the new survey and assessment rates on Government land exceeded past collections by £6860 (Rs. 68,600) or 33 1/8 per cent. The increase in the assessment on cultivated land was £3904 (Rs. 39,040) or $27\frac{1}{2}$ per cent, being less in proportion than on the whole rental as the greater increase fell on the waste land. The increase of the new rates over the settlement (Rs. 88,460) of 1828-29 was £2086 (Rs. 20,860) or about 24 per cent. [Bom. Gov. Rev. Rec. 352 of 1831, 112-115.]

Khed.

In Khed the new survey rates were fixed at 55 per cent on the net produce, a result which averaged about 27½ per cent less, than former collections. The fall in the assessment of cultivated land compared with the existing settlement was £3191 (Rs. 31,910) or 25½ per cent. [Besides in Khed, in Junnar and Pabal the new survey also as noticed above occasioned a reduction in the rates. In Indapur Purandhar and Bhimthadi it caused an increase. In the three subdivisions of Khed Junnar and Pabal the greater proportion of the landholders were well-to-do hereditary holders attached to the soil, The Collector Mr. Giberne, Bom. Gov, Rev. Rec. 352 of 1831, 125.]

Mr. Pringle's assessment was introduced between 1829 and 1831. During 1829-30 it came into force in Bhimthadi, Purandhar, Indapur, Khed, Junnar or Shivner, and Pabal; and into Haveli, Maval, and Mohol (now in Sholapur) in 1830-31. [Bom. Gov. Rev. Rec, 352 of 1831, 105-106.] Mr. Pringle's settlement was not found to improve the state of the district. In practice over most of the district the new rates were never actually enforced. In 1836 a fresh survey and settlement was begun.

1829-30.

In 1829-30 there was another failure of rain. In Indapur, Bhimthadi, and part of Purandhar, at the end of September 1829, not a blade of grass was to be seen. The crops failed completely; they were dried up

before they came into ear. In the east no collections were made except at spots where moisture gathered. Early in the year the people took their cattle with them and left in great numbers. In addition to remissions of about £38,400 (Rs. 3,84,000), or about £22,100 (Rs. 2,21,000) more than the sum granted in 1828-29, land assessed at £7772 (Rs. 77,720) was thrown up as its holders were too poor to stay and had left. The outstandings were large. Compared with 1828-29 the land revenue settlement for 1829-30 showed a fall from £111,711 to £45,409 (Rs. 11,17,110-Rs. 4,54,090). This fall was partly due to the transfer of three large sub-divisions, Sholapur to Ahmadnagar and Indi and Muddebihal to Dharwar, yielding about £43,400 (Rs. 4,34,000) of revenue. [Mr. Giberne, September 1830, Bom. Gov. Rev. Rec. 352 of 1831, 101-104.]

Bhimthadi.

The Bhimthadi sub-division was the first in which the Collector Mr. Giberne introduced Mr. Pringle's new settlement. About £2600 (Rs. 26,000) were outstanding from former years. The year 1828-29 was one of partial failure and remissions were required, but owing to changes in the staff of the local officers none were granted. [The whole rental was brought to account. In September 1830 the Collector reported that about £500 (Rs, 5000) would have to be written off. Bom. Gov. Rev. Rec. 352 of 1831, 102-103, 113. In 1829-30, according to Mr. Pringle's rates, the settlement amounted to £5946 (Rs. 59,460). Of this only about £2000 (Rs. 20,000) could be collected, as the want of rain completely ruined the crops and wasted the greater part of this sub-division. Since 1827-28, when Mr. Pringle's surveyors had measured the country, 27,312 acres had fallen out of tillage. In 1827-28 the new rates showed an increase of 13\(\frac{1}{2}\) per cent on the rental but the settlement was made according to the old system; £4627 (Rs. 46,270) were remitted, and of the £1581 (Rs. 15,810) which remained over, £605 (Rs. 6050) were outstanding at the close of the year. Compared with 1822-23 the settlement of Bhimthadi in 1828-29 showed a fall from £10,930 (Rs. 1,09,300) to £6600 (Rs. 66,000) or about forty per cent. When managed by the Tulsibag family Bhimthadi is said to have enjoyed considerable prosperity. Of this prosperity few traces were left. The villages looked poor and distressed and there seemed little chance of recovering the increased revenue which according to Mr. Pringle's survey might be recovered without hardship to the landholders. Mr. Giberne, 4th September 1830, Bom. Gov. Rev. Rec. 352 of 1831, 108-11.]

Purandhar.

In Purandhar the new survey assessment exceeded past collections by £6860 (Rs. 68,600) or 33\% per cent. The increase in the assessment on cultivated land was £3904 (Rs. 39,040) or 27½ per cent, being less in proportion than on the whole rental as the increase chiefly fell on the waste land. The new rates showed an increase of £2086 (Rs. 20,860) over the settlement £8846 (Rs. 88,460) of 1828-29. The year 1828-29 was one of partial failure and remissions were required, but they were not granted owing to a change of officers as stated in Bhimthadi. The whole rental was brought to account. In September 1830 the Collector reported that about £2000 (Rs. 20,000) would have to be written off. Bom. GOV. Rev. Rec. 352 of 1831, 102, 103, 113.] The cultivation in this sub-division varied little. The net settlement amounted to £10,448 (Rs. 1,04,480). The year 1829-30 was one of almost total failure and required the large sum of £6094 (Rs. 60,940) of remissions leaving £4354 (Rs. 43,540) to be collected. Compared with 1822-23 before which remissions had not been granted, the settlement of 1828-29 showed a decrease from £11,007 (Rs. 1,10,070) to £8846 (Rs. 88,460) that is a fall of at least one-fifth in the revenues in six years. [Bom. Gov. Rev. Rec. 352 of 1831, 112-115. For the three years ending 1828-29 outstanding balances in Purandhar amounted to £4800 (Rs. 48,000). In September 1830 the Collector feared that the season of 1829-30 would add to the outstanding balance. The people were particularly backward in paying the revenue and it was difficult to distinguish the deserving poor from the guarrelsome and cavilling holders who could afford to pay. [Mr. Giberne, Collector, Sept. 1830, Bom. Gov. Rev. Rec. 352 of 1831, 112-115.

Indapur.

Indapur was a more peculiar sub-division than either Bhimthadi or Purandhar. The rainfall was scanty and its revenue was doubtful. Few of the people were bound to the land; most of them were strangers. The new survey raised the Government demand by $76\frac{1}{2}$ per cent. In April 1830 Mr. Giberne the Collector showed what evils would result from any attempt to enforce these higher rates. In June 1830 in order to bring back people who had left, he had been allowed to keep to the old rates showing the difference sacrificed as a temporary reduction. The settlement of 1829-30 by Mr. Pringle's rates represented £9157(Rs. 91,570), but in September 1830 the Collector wrote that the crops had failed so completely that only a mere trifle could be realised. So entirely did the rain fail that immediately after the close of the rains not a blade of grass was to be seen. Early in the season, probably about July, the people left as water had failed. The returns

showed a decrease of cultivation representing a loss of £1021 (Rs. 10,210) of revenue. [Bom. Gov. Rev. Rec. 352 of 1831, 115-119.] In the Collector's opinion some change of system was required. Under the existing system if a plot of land was thrown up it would be let to the first bidder and as there was no scarcity of waste the highest bid would be far below the sum paid by the last holder. Such a practice tempted the steady farmer and hereditary tenant. to throw up his paternal land for a more favourable tenure and made the whole body of husbandmen unsettled and careless. Under Mr. Pringle's new settlement this evil had been checked. In time the people would see the advantages of keeping to and improving the lands they held. Mr. Giberne was doubtful whether in some cases the new rates had not been fixed too high. He had hoped that a revenue survey would have tended to a reduction of rates and that the necessity of remissions would have ceased. Unfortunately the failure of the 1829-30 crops had been so general and so complete that the amount settled by the new assessment could never have been realised. [Bom. Gov. Rev. Rec. 352] of 1831, 106-108. The state of the people was very depressed. They were well known to live from hand to mouth. They began to eat their crops before they were ripe and daily plucked unripe grain to give them a meal. If the season was favourable the price of grain fell so low as to make the produce of little value and remissions were required. Even if the season was bad the price did not rise because there was many years' supply on hand and remissions had again to be given. Mr. Giberne, Collector, 1830, Bom. Gov. Rev. Rec. 352 of 1831, 130-131.] As the rates introduced by the new settlement were considered to bo such as the people were able to pay and such as Government were entitled to levy, the Collector did not grant remissions in the old way but held over for future recovery the amount by which the collections fell short of the settlement. The Collector told the people their only chance of getting the balance remitted was by seeing that in future there were no balances. At the same time ho was certain that the balance could never be recovered. He had hoped that the new settlement would have reduced the rates so greatly that the revenue would have been easily paid instead of being drawn forth with the greatest labour. He was greatly disappointed that this had not been the result. In other respects, in the arrangement of the accounts, the distinction of fields, and the other details the new settlement could not be improved. Everything was simplified to the utmost. Only the revenue would be as difficult to collect as it had ever been. Before 1822-23 the revenue was collected with the greatest ease; no remissions were ever thought of. This was partly owing to the high price of grain, and the ease with which produce was disposed of. It was also insured by the character of the people, and their fears of

delaying the payment arising from the mode formerly in use of compelling payment by a variety of cruel methods, burning fingers or tying up the delinquent with heavy stones fastened to his chest or head. Though under the English these punishments were not practised, from their recent enforcement they were still dreaded. Even after the beginning of British management a stone sent round to the backward villages summoned payments, a practice which was never thought of in 1830. In 1830 a landholder had nothing to fear from delaying to pay. The severest punishments were a gain to him. [Mr. Giberne, Collector, 1830, Bom. Gov. Rev. Rec. 352 of 1831, 131-134.] The only course open to the Collector was to enforce the regulations regarding the appointment of watchmen over the crops until a settlement was made for payment. This rule would be in force during the current year; it had never been enforced before. [Mr. Giberne, Collector, 4th September 1830, Rev. Rec. 352 of 1831, 138-139.]

Bhimthadi, Purandhar, Indapur, 1820-30

In Bhimthadi, Purandhar, and Indapur the new survey settlement had increased the rates. Even under the former low rates, large remissions were required and every year large balances remained outstanding. The Collector saw no reason to suppose that the new settlement would reduce these evils. The principles of the new survey were to fix a rate which the landholders could and ought to pay and Government ought to receive. The survey superintendent Mr. Pringle said that Collectors should have the power of imposing the increase so gradually that the pressure of the new rates would be less felt. If this was acted on, the result would be to lower rates fixed on the principle of the survey, proved by the superintendent to be those which the holder could and ought to pay If the Collector were to take on himself the reduction of these rates, in theory he had no good reason to offer why the full rates should not be levied. But he knew that as a matter of fact the new rate could not be collected. If he took less than the rate fixed by the settlement, because he could not obtain it, he set aside the principle on which the settlement was based. Mr. Giberne, Collector, Sept. 1830, Bom. Gov. Rev. Rec. 352 of 1831, 119-120. In Indapur from sheer necessity the full rates were not levied. If the new rates were enforced the Collector feared that the greater part of the subdivision would become waste. His fear was grounded on the fact that the greater part of the people had left from want of water and afterwards refused to return to till the land at higher rates. [Regarding Indapur, on the 26th of March 1835, the Rev. Comr. Mr. williamson wrote, 'Before the new survey rates were introduced at Indapur the Collector expressed great fears of their success. The first year he estimated the

survey assessment at about £9159 (Rs. 91,590) while he seemed to think he could not realise more than £4230 (Rs. 42,300) being less than one-half the assessed amount. The crops were very bad, No remissions were sanctioned, A large sum was kept suspended and the actual realisations fell greatly short even of the Collector's estimate. Bom. Gov. Rev. Rec. 666 of 1835, 8.] In Purandhar the Collector made arrangements for introducing the increase by degrees. Where the rates had been doubled he directed five-eighths (10 as. in the rupee) of the full amount to be levied in the first instance and an addition of 3/32nds (1½ as. in the rupee) to be made every year so that five years would pass before the full amount was levied. Even this concession failed to satisfy the people.So great was the distress that in 1830 the lands of the large town of Sasvad were almost all neglected. Mr. Giberne, Collector, Sept. 1830, Bom. Gov. Rev. Rec. 352 of 1831,120-122]

1830-31.

The failure of the 1829 rains was followed by a second year of scanty supply. In the east in Bhimthadi, Indapur, Mohol now in Sholapur, and in part of Purandhar the crops completely failed. An early and plentiful fall of rain raised the cultivators' hopes, but the after-failure of rain withered the plants when they were only a few inches above ground. At harvest time the country was a miserable waste, and the people were suffering and full of complaints. Still the actual collections for 1830-31 were more favourable than those of former years. Territorial changes prevented any exact comparison. In 1830-31 Sholapur and Barsi were transferred from Ahmadnagar to Poona. In spite of the local failure of rain produce prices continued very low from thirty-three to fifty per cent below the average of prices during the twenty years before the beginning of British management. [The details are:

Poona District, Produce Rupee Prices, 1797-1831.

| SUB-DIVISION. | 1797- 1817. | 1831. | SUB-DIVISION. | 1797- 1817. | 1831. |
|---------------|----------------|--------|---------------|----------------|--------|
| | Shers. | Shers. | | Shers. | Shers. |
| Shivner | 201/4 | 331/2 | Bhimthadi | 23 | 301/2 |
| Indapur | 22 | 35½ | Haveli | 211/2 | 31 |
| Khed | 25¾ | 38¾ | Maval | 171/2 | 271/2 |

| Pabal | 21⅓ | 33½ | Poona City | 201/2 | 26¾ |
|-----------|-----|-----|------------|-------|-----|
| Purandhar | 19¼ | 27¾ | | | |

Mr. Giberne, Collector, 15th August 1831, Bom. Gov. Rev. Rec. 407 of 1832, 302.]

Large remissions were again necessary. [Bom. Gov. Rev. Ree. 407 of 1832, 276, 291, 292.] The land revenue settlement of 1830-31 showed an increase from £45,409 (Rs. 4,54,090) in 1829- 30 to £67,185 (Rs. 6,71,850). Compared with former years the actual collections were favourable. [Bom. Gov. Rev. Rec. 407 of 1832, 290. Regarding Indapur, on the 26th March 1835 the Revenue Comr. Mr. Williamson wrote, 'In 1830-31 the mamlatdar reported that the landholders refused to cultivate the land according to the survey rates. A correspondence followed between the Collector and the mamlatdar which ended in an order to the mamlatdar not to demand increases which added more than 25 per cent to the former assessment. Where the new rates were lower than the old, the new rates only were to be collected. Even this reduced assessment did not stand. The crops were again bad and remissions were granted.' Bom. Gov. Rev. Rec. 666 of 1835, 8-9.]

1831-32.

In 1831-32 compared with 1830-31 the land revenue settlement showed an increase from £67,185 (Rs. 6,71,850) to £68,073 (Rs. 6,80,730); remissions on account of land and miscellaneous revenue showed a fall from £37,420 to £24,998 (Rs. 3,74,200-Rs. 2,49,980); and out standings were comparatively small. [Bom. Gov. Rev. Rec. 484 of 1833, 21, 23, 24.] In this year the Commissioner Mr. Dunlop directed the attention of the Collectors to the ruined state of the village walls and of the necessity of having them repaired. [Mr. Dunlop, 29th November 1831, Bom. Gov. Rev. Rec. 406 of 1832, 13.]

1832-33.

In 1832 the rains again failed. The scarcity began about sixteen miles east of Poona and extended to the extreme east and south of the district. The loss of revenue was most marked in Sholapur, Mohol, Barsi, Indapur, Bhimthadi, and Purandhar. In Indapur the net rental was £7403 (Rs. 74,030), and of this the whole except £806 (Rs. 8060) had to be remitted. To the west of a line about sixteen miles east of Poona the early rain was abundant. About the middle of the season the

supply failed and the half-grown fields of grain being left without moisture yielded either no crops at all or a very poor outturn. The after-rains were so slight that the late crops were either never sown or died soon after they sprang up. The land revenue settlement showed a fall from£ 68,073 (Rs. 6,80,730) in 1831-32 to £38,715 (Rs. 3,87,150). [Bom. Gov. Rev. Rec. 550 of 1834, 11 -48.]

On the 18th of July 1831 Mr. Pringle proposed to grant a uniform reduction of thirty-three per cent upon the settlement made by him. [Bom. Gov. Rev. Rec. 426 and 427 of 1832.] On the 7th of October 1831 Government asked the Revenue Commissioner for his opinion on the proposed reduction. Mr. Raid the Acting Revenue Commissioner referred the matter to the Collector and asked for a figured statement.

Mr. Pringle's Survey, 1832-33.

This was furnished on the 10th of August 1832, [Bom. Gov. Rev. Rec. 517 of 1833, 38, 47. The total amount of loss on the gross settlement of the year 1831-32 (Fasli 1241) was estimated at £22,249 (Rs. 2,22,490. The details are:

Poona Revenue, 1831-32.

| SUB- DIVISION. | Gross Settlement. | Amount at 33 per cent. | Remis- sions. | SUB- DIVISION. | Gross Settlement. | Amount at 33 per cent. | Remis- sions. |
|-------------------|----------------------|------------------------|------------------|-------------------|----------------------|------------------------------|------------------|
| | Rs. | Rs. | Rs. | | Rs. | Rs. | Rs. |
| Shivner | 1,52,672 | 50,382 | 60,724 | Haveli | 76,830 | 25,354 | 16,603 |
| Indapur | 69,858 | 23,053 | 50,009 | Maval | 51,997 | 17,159 | 519 |
| Khed | 81,574 | 26,919 | 11,059 | Poona City. | 2383 | 786 | |
| Pabal | 80,190 | 26,,463 | 37,153 | | | | |
| Purandhar | 96,705 | 31,912 | 36,918 | Total | 6,74,208 | 2,22,488 | 2,38,400 |
| Bhimthadi | 61,999 | 20,460 | 25,415 | | | | |

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and on the 15th of February 1833 Revenue Commissioner Mr. Williamson in submitting his report [Bom. Gov. Rev. Rec. 517 of 1833,

37-43. to Government remarked that Mr. Pringle's estimates of the average price of field produce were framed when produce was much more valuable than it had since become. Mr. Williamson thought, that if there was reason to suppose the great fall in produce prices would last, Mr. Pringle's suggestion to reduce his rates by thirty-three per cent would be a suitable measure. But, since Mr. Pringle had made the proposal for reducing his rates, in consequence of the failure of crops in 1832, prices were higher than they had been even the years on which Mr. Pringle's original estimates were based. The food stocks were also so low that Mr. Williamson thought even a good year would fail to bring grain down to its former low level [At Indapur *ivari* rupee] prices were in April 1829 about 160 pounds (80 shers) in April 1830 about 92 pounds (46 shers), in May 1831 about 80 pounds (40 (shers February 1832 about 120 pounds (60 shers), in February 1833 about 46 pounds (23 shers), in February 1834 about 92 pounds (46 shers), in February 1835 about 96 pounds (48 shers), and in February 1836 about 76 pounds (38 shers). Bom. Gov. Sel, CVI1. 118.] Mr. Williamson doubted whether the system on which Mr. Pringle's rates had been fixed was so good that the simple plan of reducing the rates all round would make the settlement successful. Mr. Williamson's experience satisfied him that Mr. Pringle's assessment was too light on the good lands and too heavy on the poor lands. Government lost in both ways. The good land paid less that it ought, and the poor land fell waste. [Bom. Gov. Rev. Rec. 595 of 1834, 9-11.] Finally Mr. Williamson feared that the work of Mr. Pringle's subordinates was not trust-worthy. Complaints of the dishonesty of some of the underservants were loud. He thought that an officer should be appointed under the Revenue Commissioner and deputed to go in detail through a certain number of villages and compare the result of his examination with the details recorded in Mr. Pringle's survey. Government would then be in a position to judge how far Mr. Pringle's assessment might be accepted as accurate. Government agreed with the Revenue Commissioner that further information regarding the trustworthiness of Mr. Pringle's assessment was required. In March 1833 they appointed Captain Dowell of the Ratnagiri survey to make inquiries into the survey assessment lately completed by Mr. Pringle. [Bom. Gov. Rev. Rec. 517 of 1833, 49, 51-52, 55, 57-59. Shortly after his appointment Captain Dowell fell sick and the inquiry had to be put off. [The Rev. Comr. 29th June 1833, Bom. Gov. Rev. Rec. 517 of 1833, 191; Gov. Letter, 16th October 1833. Ditto, 241. In November 1833 Government ordered that the survey rates should be continued, but that the Collector might make inquiries and introduce amended rates in a few villages. [Gov. Letter, 21st Nov. 1833; Bom. Gov. Rev. Rec. 517 of 1833, 249 - 252, 255.]

In 1833-34, the famous pik sal or crop-year, the rainfall was sufficient and timely. Out of a land revenue of £96,461 (Rs. 9,64,610) all but £3856 (Rs. 38,560) were collected by November 1834. The Collector, 19th January 1835, Bom. Gov. Rev. Rec. 628 of 1835, 14.] The changes which had to be introduced in Mr. Pringle's settlement rates in consequence of the succession of bad years, caused great confusion in the revenue accounts. This confusion opened a door for fraud, and the native officials seem to have fallen into a state of grave corruption. They appropriated a great part of the liberal remissions to their own use, and introduced a system of secret exactions which in some cases produced more than double the Government revenue. The Revenue Commissioner believed that not one-half of the remissions had reached the people and not one-half of the collections had reached the Government. [The Revenue Commissioner's Reports on the subject are dated 24th October 1832 and 19th August 1833, quoted in his Report of 26th March 1835, Bom. Gov. Rev. Rec. 666 of 1835, 11-12.] In June 1834 Mr. Baber the Collector of Poona wrote to the mamlatdar to try and recover more of the outstandings in his charge, and told him that his promotion would depend on the vigour he showed in recovering the outstandings. Soon after this it was discovered that the people had been tortured to make them pay the revenue. Twenty persons including the mamlatdar and several hereditary officers were convicted of torturing or of abetting torture and were imprisoned for periods varying from one to seven years. Details are given in Bom. Gov. Sel. CVII, 17 -19.]

In 1834 (January 30th) Major Robertson forwarded the results of his inquiries into the details of Mr. Pringle's settlement. He considered the work so full of inaccuracies and frauds that it could not safely be made the basis of fresh assessments. [Bom. Gov. Rev. Rec. 595 of 1834, 37] -131. In this opinion Mr. Williamson the Revenue Commissioner (27th April 1834) agreed. [Bom. Gov. Rev. Rec. 595 of 1834, 1 - 33.] In Mr. Williamson's opinion one of the chief reasons why Mr. Pringle's work had ended in failure, was the unfitness of the staff. They were ignorant of the work at starting, and they were employed only for a time, and so were tempted to carelessness and dishonesty. There was no sufficient supervision and Mr. Pringle had to leave much to his headman who had since been convicted by the Sessions Judge of fraud and cheating. [The details of the establishment were: Head assessors 8, assessors 54, assessors' karkuns 183, examiners of survey 35, surveyors 359, peons 525, total 1164. Bom. Gov. Rev. Rec. 595 of 1834, 2-3.] Besides the unsuitableness of the staff for the difficult and

important details of field work there had been no provision for supervision. The only case where special inquiry was made was when some land-holder complained of the new rates. There was no protection to Government against the fraud of an assessor charging land unduly low rates. Major Robertson detected several cases in which rice and garden land was entered as dry crop, and in some instances whole villages were rated at a fraction of similar and neighbouring villages. Many fraudulent changes to the loss of Government had been made in Mr. Pringle's head-quarter office. Alienated or inam land had been increased and temple allowances had been raised as much as 3714 per cent. [Bom. Gov. Rev. Rec. 595 of 1834, 8, 9,63, 66-73. Of the errors noted by Major Robertson there was around Sinhaad the omission of 55 and in the village of Kalyan close under Sinhaad the omission of 76 fields. Assessable land was left out of the records of seven or eight other villages. In the village of Male in Paud Khore lands belonging to a *deshmukh* had been correctly rated by the assessor but were marked as excessively assessed by the head assessor and unduly reduced. In Khed the village of Chinchuli was found rated at about one-third of the rates levied in neighbouring and similar villages. In another village a field of 115 acres whose proper assessment was £16 8s. (Rs. 164) was entered at 41 acres with a rental of £38s. (Rs. 34). This field had been examined by the head-quarter staff. Bom. Gov. Rev Rec. 595 of 1834,62-63, 87-94.] Under these circumstances Mr. Williamson thought that without further inquiry it was unsafe to base any settlement on Mr. Pringle's survey. He suggested that an officer should be appointed to resume the inquiry which had been begun by Captain Dowell, [Bom. Gov. Rev. Rec. 595 of 1834, 19.] In July 1834 Government ordered that the temple allowances should be reduced to the former amount. [Gov. Letter, 1953 of, 15th July 1834, Bom. Gov. Rev. Rec. 595 of 1834, 229. In August 1834 they appointed Lieutenant Shortrede to resume the inquiry formerly entrusted to Captain Dowell. [Gov. Letters 1952 of 15th July 1834 and 2329 of 30th August 1834, Bom. Rev. Rec. 595 of 1834, 235, 245.]

1834-35.

In 1834 the rainfall must again have been sufficient though lets favourable. The land revenue showed a fall from £96,461 (Rs. 9,64,610) in 1833-34 to £92,720 (Rs. 9,27,200), but by the end of October 1835, all but £5817 (Rs. 58,170) were collected. [Bom. Gov. Rev. Rec. 694 of 1836, 244 - 248.] About this time an important and useful change was made in the revenue management by appointing mahalkaris or petty division officers subordinate to mamlatdars. [Bom.

Gov. Rev. Rec. 665 of 1835.] This change at first seemed to work well. It was afterwards found that the mahalkari's staff had been fixed at too low a strength. Their strength was increased, and in 1838 Mr. Williamson was satisfied with their working. In his opinion no measure had done more to improve the revenue management of the Deccan than the excellent system of subordinate divisions or *mahals*. [Mr. Williamson, Rev, Comr. 26th April 1836, Bom. Gov. Rev, Rec. 694 of 1836 228, and 2610 of 23rd November 1838.]

During 1834-35 Lientenant Shortrede inquired into the details of Mr. Pringle's survey indapur. Of its eighty-four villages he examined the lands of about twenty. He measured a number of fields in several villages, and with two exceptions found them remarkably correct. On the other hand the classing of the soil was remarkably incorrect; the classification seemed to have no connection with the colour or qualities of the soil. Deep rich black soil, acknowledged by the people to be of the best quality, was entered as second black or red, and poor waste or gatkul land was entered as of the first sort. [Bom. Gov. Rev. Rec. 666 of 1835, 44-49.] In the rates there were many instances of unfairness; villages whose land was good were assessed at lower rates than villages with inferior soil, and lands held by village and district officers were assessed at unduly low rates. [Bom. Gov. Rev. Rec. 666] of 1835, 30, 49. In many villages the survey rates could not be realized. Most of the lands were held at ukti or reduced rates, varying from one-half to three-fourths of the assessment. Though in practice a dead letter, Mr. Pringle's survey rates remained the nominal rental. The reductions from this nominal rental offered the district officers excellent chances of fraud of which they were not slow to take advantage. So far as related to Indapur Lieutenant Shortrede could not recommend the continuance of the survey assessment. He saw no permanent system of management by which the survey assessment could be immediately superseded. The country was exhausted and deserted. So far as he could see, no official data of any value were forthcoming on which a permanent settlement of the revenue could be founded. A yearly settlement left open many avenues to mismanagement on the part of the native authorities which Lieutenant Shortrede believed the European authorities, however vigilant and active, would never be able to close. Under these circumstances Lieutenant Shortrede held that the first year of settlement should be experimental, and that the terms of the settlement should be favourable to the landholders to enable them to enter with substance and safety on a permanent settlement in the following year. The report of favourable terms would bring back most of the absent landholders. Meanwhile an active and able assistant might, during the year, gain

knowledge enough to enable him to make a ten years' settlement. The settlement which Lieutenant Shortrede proposed for the first year was to let the best land at £6 (Rs. 60) a chahur or 120 bigha's and the poorer lands at £5 to £4 10s. (Rs. 50-45) the chahur. The bigha varied in size according to the soil. In good land it was a half to threequarters of an acre; in poor lands three-quarters of an acre to one acre. The proposed rates were equal to acre rates varying from 1s. 4d. to 2s. (10 2/3 as. -Re. 1) on good land, and from 9d. to 1s. 1½d. (6-9 as,) on poor land.] He believed the people would willingly take lands on these terms. They did not differ much from the old Muhammadan or tankha rates, and good inam lanas were let at £5 to £7 (Rs. 50-70) the chahur. These rates were low; in Lieutenant Shortrede's opinion they were less than a, fair rental. Still the system of remissions was in practice so evil and corrupt that it should cease even at-a great sacrifice. After the first experimental year he suggested that the lands should be let on a ten years' lease at much the same rates as those levied in the experimental year. A lease at a fixed rent would help the people to look forward and force them to lay by for bad years. [Lieut. Shortrede, 15th January 1835, Bom. Gov. Rev. Rec. 666 of 1835, 50-54.]

The Revenue Commissioner Mr. Williamson submitted this report on the 26th of March 1835. Mr, Williamson, Rev. Comr. 502 of 1835, Rev. Rec. 666 of 1835, 1-40. The inquiries Mr. Williamson had made in Indapur two years before and the information he had lately collected satisfied him that a change in its management was necessary. Its rich soil and most uncertain rainfall, tempting them back and driving them away, made the people unsettled. In bad seasons they wandered to the Nizam's country. [Bom. Gov. Rev. Rec. 666 of 1835, 1-2.] So far the British management was a failure. There had been no fixed system. At first a yearly settlement was made and then leases on rising rents were introduced, and again yearly settlements which of late years had been in great measure left to the village clerks and headmen. The seasons had been uncertain and bad. There was a mass of outstanding balances, and large remissions, much of which the native officers stopped on their way to the people, completed the confusion. [Bom. Gov. Rev. Rec. 666 of 1835, 7. Mr. Williamson believed that not one-half of the remissions had reached the landholders and not one-half of the collections had reached the Government. The frauds took place during the third year (1831-32) of the operation of the survey rates and were exposed during the fourth vear (1832-33). The Rev. Commissioner's reports on the subject are dated 24th October 1832 and 19th August 1833. Mr. Williamson says in March 1835, 'Of the extent of the peculations of the district and

village officers some conception may be formed from the exposure of their corruption which followed my last visit to the pargana and from the judicial inquiries which terminated in the conviction and punishment of the mamlatdar and several of the local officers who had shared in the village spoils.' In some places the unauthorized collections actually exceeded the authorized. In one case the unauthorized collections amounted to Rs. 357 against a Government demand of Rs. 137; in another case the unauthorized collections amounted to Rs. 789 against a Government demand of Rs. 255; in a third case the unauthorized collections amounted to Rs. 321 against a Government demand of Rs. 133; in a fourth case 'while the receipts of Government amouted to Rs. 303, Government were defrauded of Rs. 368. Mr. Williamson, Rev. Comr. 26th March 1835, Rev. Rec. 666 of 1835, 11-12. Mr. Williamson, while admitting that the survey was not the cause of all the evils from which Indapur suffered, agreed with Lieutenant Shortrede that the survey assessment should not be continued. [Bom. Gov. Rev. Rec. 666 of 1835, 14.] Mr. Williamson thought Lieutenant Shortrede's scheme of an experimental year followed by a ten years' lease was well devised. He thought it could be carried out with no material obstacle. The system was simple and the rent moderate. The people would at once understand it and take to it Mr. Williamson approved of the *chahur* as the unit of assessment Until they had been puzzled and paralysed by survey rates, reductions, suspensions, and remissions, the landholders had always spoken of their holdings as fractions of a chahur. The area of the chahur varied with the soil from 90 to 120 bighas. The chahur was not a completely accurate unit, but where irregularities existed they might, he thought, be removed at the settlement. [Bom. Gov. Rev. Rec. 666 of 1835, 17-18] Mr. "Williamson thought the *chahur* rates proposed by Lieutenant Shortrede, £6 (Rs. 60) on the best lands and £5 or £4 10s. (Rs. 50 or Rs. 45) on inferior lands, low but not too low considering the impoverished state of Indapur, the uncertain rainfall, the want of people, and the urgency of stopping yearly remissions. [Bom. Gov. Rev. Rec. 6 of 1835 18.] Simplicity was a great merit in any settlement. As the soil of Indapur was unusually uniform, he thought two rates would be enough. At the same time he thought that the settlement officer should have power to meet local peculiarities by special rates. He approved of Lieutenant Shortrede's proposal to grant ten-year leases and dwelt on the importance of limiting the area leased to each holder. If the holder took up more land than he was able to till, a slight misfortune might overset his plans and make him fail in his engagements. [Mr. Williamson, 26th March 1835, Bom. Gov. Rev. Rec. 666 of 1835, 20-21. The lease should have some provision to ensure an abatement of the demand in a year of failure of crops. He

objected to the grant of leases in the form of *Kauls* with rising rentals. Remissions of this kind were occasionally necessary, but the practise on any large scale was evil. It led men to leave their old fields, take rent-free land, and again throw it up as soon" as the rent had increased to a moderate amount. [Bom. Gov. Rev. Roc. 666 of 1835, 24.] He was opposed to any grants of village leases. As a body the Deccan headmen had been proved to be corrupt, robbing the people on the one hand and Government on the other. With village leases the people would be in the hands of men who were unfit for any position of trust. [Mr. Williamson says (26th March 1835), I would endeavour to commence the system directed in Government letter, dated 25th February 1834, before the rains, if good patils as farmers were procurable and the circumstances of the villages favoured that mode of settlement.' Bom, Gov. Rev. Rec. 666 of 1835, 26-28.] In June 1835 Government sanctioned the proposed experimental settlement for one year. [Gov. Letter 1326 of 12th June 1835, Bom. Gov. Rev. Rec. 666 of 1835, 73-74.]

In June 1835, on receiving the Government sanction and the Revenue Commissioner's instructions, the Principal Collector Mr. Mills directed his assistant Mr. Goldsmid, who since February 1835 had been in special charge of Indapur, to take steps to carry the plan into effect. [The Principal Collector, 22nd June 1835, Bom. Gov. Rev. Rec. 666 of 1835, 103.]

Mr. Goldsmid, while thoroughly approving of the proposed system, suggested certain changes. [His Report dated 27th June 1835, Bom. Gov. Rev. Rec. 666 of 1835, 105 -124.] He was satisfied of the necessity of reassessing Indapur. After spending nearly four months in the subdivision (February-June 1835) he was certain that no scheme could be devised better calculated to injure the interests of both Government and its subjects than the existing system. [Bom. Gov. Rev. Rec. 666 of 1835, 106-107. On two points he desired the instructions of the Revenue Commissioner, the term for which the settlement was to be made, and the unit of measurement. As the expense would be the same for one or ten years, on the score of economy he recommended a ten years' settlement. Another and still stronger reason for the settlement being made at once for ten years was that if the land was given out on the liberal terms proposed by the Revenue Commissioner, so that in years of partial failure no remissions might be requisite, the loss to Government would be comparatively speaking immense nnless the settlement were followed by a large increase of cultivation. The resident landholders were not numerous enough to ensure the requisite increase of cultivation, and

outsiders could not be expected to come and build dwellings and clear waste merely because the land was assessed low for one year. As regards the unit of measurement Mr. Goldsmid was not in favour of the chahur or 120 bighas. The chahur was not a definite measure of quantity. It would therefore be necessary to have a number of different chahur rates to equalize the difference in area. If acre rates were introduced in dry-crop land three rates would generally be sufficient. [Bom. Gov. Rev. Rec 666 of 1835, 113-114.] In the absence of trustworthy evidence, it was necessary in assessing the land to visit every field and examine its soil and position. Mr. Goldsmid proposed to engage four native clerks unconnected with the district. Every morning and evening these clerks would prepare statements of the quality quantity and situation of the land. Mr. Goldsmid would himself revise the returns so closely as to make fraud impossible. During the heat of the day, with the aid of fresh clerks Mr. Goldsmid would prepare from the revised returns detailed statements of the class to which each field belonged, the number of bighas it contained, and the rate at which it should be assessed He proposed to arrange the *jirayat* or dry-crop land into three classes, and to assess them according to either of two scales, two. three, and four acres the rupee or three, four, and five acres the rupee. He preferred the lower scale, as with the higher scale in Indapur where rain was so scarce, remissions would be often required. To enable Government to form a just opinion regarding the relative merits of the two scales, before entering into engagements with the landholders, he promised to submit the result of the settlement of ten villages. On completing his arrangements in every ten villages he proposed to give the landholders written agreements to the effect that they were to be allowed to reap the whole advantages of any improvements they might make in their holdings and keep them at a fixed rate for ten years. He would also, where procurable, enter a neighbouring number or two which the landholders should be allowed to take for tillage within a certain period of years at rates determined according to the proposed scale. Regarding the area of land to be put aside and the term within which the exclusive power of claiming it should remain with the landholder, Mr. Goldsmid asked to be allowed to exercise his discretion. It would, he said, be impossible to follow any one fixed and uniform scheme even in a single village. He would give effect to the liberal orders of Government directing that landholders be permitted to take up land without paying fee or nazarana. At the same time he feared that by giving out land at the low rates proposed, there might be risk that casual or *vpri* landholders would take up more waste or gatkul land than they could afford to till and keep out more deserving tenants. [Bom. Gov. Rev. Rec. 666 of 1835,117. To prevent this he proposed that, unless a holder took up

the land within one to four years, his claim to it should cease. Mr. Goldsmid found the rates in garden or watered land ridiculously low. The sacrifice of the Government share had not even the effect of enriching the landholder. The bulk of the profits passed to some moneylending Brahman who agreed to pay the Government dues if he got half of the crop and sometimes persuaded the holder to take an advance to grow some rich crop. When the soil was exhausted by this heavy crop the Brahman would withdraw from the arrangement. [Bom. Gov. Rev. Rec. 666 of 1835, 117-119.] Mr. Goldsmid thought Government revenue was being needlessly sacrificed. He proposed that the garden land of Indapur should be assessed at 4s. (Rs. 2) an acre. If higher rates were fixed remissions might be necessary. He thought that channel-rates might be higher than well-rates. He was anxious to introduce the new well-rates at once. The dry-crop rates could not be brought into force till 1836-37 (Fasli 1246). Mr. Goldsmid, 27th June 1835, Bom. Gov. Rev. Rec. 666 of 1835,119-124.]

In forwarding Mr. Goldsmid's letter to Government Mr. Williamson (24th July 1835) [Bom. Gov. Rev. Rec. 666 of 1835, 77 - 85.] agreed that, considering Mr. Goldsmid's special knowledge of the villages, it would be safe at once to introduce a ten years' lease. He also withdrew his objection to the use of the acre as the unit of measurement. As regards rates Mr. Williamson thought it would be advisable to introduce a fourth or lower rate for specially poor soils. He did not agree with Mr. Goldsmid that there was much risk that landholders would take land they were not able to till. He thought that a man should be left free to take land if he chose. In 1832 when Government had taken off the well cess they stated that it might afterwards be found advisable to raise the rates levied on garden land. He agreed with Mr. Goldsmid that the rates should now be increased. [Bom. Gov. Rev. Rec. 666 of 1835, 82, 97-98. The enhanced rates should be light, but he would leave it to Mr. Goldsmid, acting under the Principal Collector's superintendence, to fix its amount. He thought that where a village was deserted or was much decayed Mr. Goldsmid might be allowed to grant the village in lease. But, except perhaps on inferior lands, the rates should be fixed before the village was leased. [Bom. Gov. Rev. Rec. 666 of 1835, 77-85.] On the 7th of September 1835 Government approved and sanctioned the ten years' settlement and adopted the acre as the unit of measurement. Gov. Letter 2056 of 1835, Bom, Gov. Rev. Rec, 666 of 1835,141 -156.] Government agreed that the fixing of the rates of assessment should be left to Mr. Goldsmid. They did not approve of the proposal to levy an additional cess on garden land. They also thought the proposal to reserve for

each landholder a portion bordering on his holding unnecessary. If carried out, there was the risk that some of the richest land in the village might remain waste. They thought that with such low rates it might be necessary to guard against villagers taking up more land than they could afford to till. The village officers were in every case to inform the settlement officer of the condition of men anxious to take land. They agreed that Mr. Goldsmid should inquire into village claimants and expenses and into temple allowances, and that where he thought it advisable he should grant decayed villages in lease to headmen. [Gov. Letter 2056 of 1835, Bom, Gov. Rev. Rec. 666 of 1835, 141-156.]

In August 1835 Mr. Goldsmid had Mohol, now in Sholapur added to his charge. He brought to light a system of fraud which Government (24th November 1835) described as a discredit to British rule. [Bom. Gov. Rev. Rec. 666 of 1835, 245.] Under these frauds the people were suffering so severely that Mr. Goldsmid believed that numbers would have left had they not taken heart at the sight of a European officer come to live among them. [Mr. Goldsmid, 22nd August 1835, Bom. Gov. Rev. Rec, 666 of 1835, 78, 204 214, 218, 219.] Mr. Williamson recommended that an engineer officer should be placed under Mr. Goldsmid to conduct surveys and to relieve Mr. Goldsmid from the labour of checking measurements. Mr. Goldsmid in charge of Indapur and Mohol, 22nd August 1835; Mr. Williamson, 1541 of 22nd September 1835, Bom. Gov. Rev. Rec. 666 of 1835, 201 -204.] Government appointed Mr. Blakiston assistant to Mr. Goldsmid, and said that as soon as another writer, that is civilian, was available he would be appointed. They also approved of Mr. Williamson's plan of placing an engineer officer under Mr. Goldsmid's orders for survey purposes. Lieutenant Wingate was appointed to this special duty. [Gov. Letter 2733 of 24th November 1835, Rev. Rec. 666 of 1835, 245-248.] In October 1835 Lieutenant Shortrede [His reports are dated 1st October and 10th November 1835, Bom, Gov. Rev. Rec. 698 of 1836, 75, 95.] made proposals for a revised assessment in Purandhar where the rates of Mr. Pringle's survey had been found so unsuitable that since 1830 they had been given up and the old or mamul rates adopted. [Bom. Gov. Rev. Rec. 698 of 1836, 35-36.] There were two difficulties in fixing the assessment of Purandhar, the village papers had been falsified and eight or nine land measures were in use. Of the land measures the chief were the bigha and the chahur of 120 bighas. [Their names were bigha, chahur, rukka, takka, partam, paika, dori, khandi, and the acre introduced under Mr. Pringle's survey (1825-30). The kathi or rod used in measuring a bigha was of 119 1/6 inches or 5/6 ths of an inch short of ten feet. By this

measure about 37 bighas went to 35 acres. But, in fact, the bigha was large or small according as the land was bad or good though the variety in area due to the quality of the soil was not uniform. The bigha was the only unit besides the acre which professed to be a measured quantity of land. Bom, Gov, Rev. Rec, 698 of 1836, 83-84,] The rates of assessment under Nana Fadnavis when the country flourished were not uniform in every village nor in every year. In villages where the soil was of ordinary quality the rates seemed to have varied from £6 to £9 (Rs. 60-90) the chahur; villages whose lands were generally of good quality were assessed at £9 to £12 or £13 (Rs. 90 to 120 or 130); and a few villages whose lands were of inferior quality were assessed at £3 12s. to £6 (Rs. 36-60). For some years after the great famine of 1792 assessment was low probably on account of the exhausted state of the country. It increased till the famine of 1803 when it again fell to about one-fourth of the full rate. Under Bajirav it rose in a few years to the full rate and continued at or beyond the full rate till the country came into the possession of the British. The hereditary village officers took advantage of the ignorance of British officials to falsify the village records. This in Lieutenant "Shortrede's opinion was a principal cause of the bad management from which the country had since suffered. The want of honest documents and the interested and corrupted statements which had taken their place had caused the disorder which the revenue survey was meant to cure. Mr. Pringle's survey rates had been judged unsuited for Purandhar and were in force for only one year (1829-30). Under these circumstances Lieutenant Shortrede thought (1st October 1835) that nothing more than a temporary settlement could be proposed. Even for a temporary settlement the means available were deficient. Pull half of the lands were lying waste (1835). In his opinion the documents of the British Government were chiefly useful as showing by what means the country had been brought to so miserable a state. Lieutenant Shortrede thought that as an immediate settlement was wanted, the only plan was to use Nana Fadnavis' documents as the basis of the settlement, and to apply the results of neighbouring and similar villages to villages which had none of Nana Fadnavis' records. In Nana's times there were few cesses or babtis. Many were introduced under Bajirav. In 1830 when the original or mamul rates were ordered to be enforced, Bajirav's cesses were included. Lieutenant Shortrede thought this a mistake and that all or almost all cesses should he remitted. He also recommended that the village claimants or hakdars should be paid by Government and not by the villagers, as these payments were a cause of grievous extortion. [Closely connected with the babs and haks was the batta or exchange on the rupees current in the Purandhar sub-division in order to make

up the deficiency in their value. It seemed to be a general practice for the kulkarni and patil to take from the people double of the authorized exchange and the people complained much of the hardship to which they were subject from the variety of coins current through out the country, though they did not seem aware of the particular fraud thus practised with impunity on them by the patil and the kulkarni. Bom, Gov. Rev. Rec. 698 of 1836, 91-92. He thought also that serious frauds were committed by the headmen and clerks appropriating to their own uses a large share of the funds which they levied from the people as village expenses or gaon kharch. [Bom. Gov. Rev. Rec. 698] of 1836, 95 - 96.] In forwarding this report Mr. Williamson stated that it had never been intended that the cesses should be included in the original or mamul rates which were substituted for the survey rates. [Mr. Williamson, 4th January 1836, Bom. Gov. Rev. Rec. 698 of 1836, 36.] He thought that all except perhaps one or two cesses should be given up. He approved of Lieutenant Shortrede's proposal to go back to the rates under which the country had prospered under Nana Fadnavis. But care must be taken to reduce these rated in proportion to the fall in produce prices.. The fall was roughly about one-half which would reduce the rental of Nana's best land from £12 (Rs. 120) the chahur to £6 (Rs. 60). [Bom. Gov. Rev. Rec. 698 of 1896, 36-40.] This arrangement he did not suggest as permanent. It was to have effect till trained officers, were available to introduce a correct survey. Any unauthorised increase that could be proved in the village expenses since the beginning of British rule should be reduced. [Mr. Williamson, Rev. Comr. 27 of 4th January 1836, Bom. Gov. Rev. Rec. 698 Of 1836, 35-49.] In January 1836 Government sanctioned the proposed revision. The Rev. Comr. 27 of 4th January 1836, Gov. Letters 196 and 197 of 22nd January 1836, Bom. Gov. Rev. Rec. 698 of 1836, 35, 155, 157.]

1835-36.

The rains of 1835 were far from favourable. In many subdivisions they were late of setting in; in many places the crops withered for want of moisture and in others they failed altogether. On the other hand in some parts of the district the fall was so heavy as to injure the early crops and to keep back the sowing of the late crops. Locusts appeared in some subdivisions and caused damage, and in the beginning of January 1836 severe cold injured the crops. Under all these disadvantages the land revenue showed a fall of about £6890 (Rs. 68,900). Of this decrease part was owing to a decline in the tillage area and part to an increase in remissions which it was found necessary to grant in consequence of the extensive failure of the

crops. [Bom. Gov. Rev. Rec. 772 of 1837, 9, 30.] About 1835 measures were taken to improve towns and establish markets throughout the Deccan. Details are given in Bom. Gov. Rev. Rec. 666 of 1835.] In October 1835 Lieutenant Shortrede submitted a report on Mr. Pringle's survey. [Lieut. Shortrede, 24th October 1835, Bom. Gov. Rev. Rec. 698 of 1836, 401-462. In measuring, Lieutenant Shortrede found errors representing an average of about 16% per cent. [Bom. Gov. Rev. Rec. 698 of 1836, 342-343, 456 458.] As regards classing Mr. Pringle divided the dry-crop land into three classes, black or *kali*, red or *tambdi*, and gravelly or b*ardi*. In Indapur and Purandhar each class was divided into three grades, first second and third, and in Mohol, Barsi, and Sholapur the biack *kali* and the gravelly *bardi* had each four grades, and every field throughout the country was entered as belonging to one of these classes and grades. Lieutenant Shortrede inclined to agree with Mr. Pringle that, if the work had been honest, three grades of each class of soil would have been enough for a fair assessment. The first step towards fixing the assessment was to class the land; the next step was to find the net produce. To find the net produce about sixty acres of each class, or as much land as might be cultivated by one eight-bullock plough, was taken, the whole value of the produce was estimated, and the necessary and customary charges of tillage and bringing to market were deducted. Of the net produce thus determined fifty-five per cent was taken as the revenue to be paid to Government. Lieutenant Shortrede thought this system excellent in principle. [Bom. Gov. Rev. Rec. 698 of 1836, 416. The distinguishing feature of Mr. Pringle's settlement was the principle of assessing at a certain proportion of the net produce. Lieutenant Shortrede and the Rev, Cemr. Mr. Williamson did not object to the principle while Lieutenants Wingate and Nash and the Principal Collector Mr. Mills held that the principle was unfair. In their opinion the result of assessing at a certain proportion of the net produce was unfair. Under it the cultivator was remunerated not according to his labour but in proportion to the value of the field on which he laboured. On the same capital, rich soil yielded a much greater profit than poor soil. Lieutenant Wingate gives (Bom. Gov. Sel. CVII., 14, 129) the following statement to show the inequality of Mr. Pringle's survey rates in consequence of being a percentage of the net produce, and shows how the rates might have been fixed so as to render the profit of cultivating every description of land the same:

Rental on Net Produce, How Faulty.

| SOIL. Acres Value of MR. PRINGLE'S SURVER | PROPOSED RATES. |
|---|-----------------|
|---|-----------------|

| | capa | able eing | | net | C Q | | | | R | ΑT | ES | • | | | | | | | | | | | |
|-----------------|-------------------------------------|-----------------------------------|-----|-----|------------|-----------------------|--------------------------------|---------------|------------------|-----------------|-------------------|---|----------------------------|---------------|-----|------------|----|-----|-------------|----|--------------------------------------|------------------------|----------------|
| | cultiv at yea expe of I | rated a Irly ense Rs. | | | | cei r pro or | pe nt o net du acr | of ce e | rei on acr | es he con | l e is d | Bala n pro bein pro cultiv | et duc g th fit c | e ne of | | cre ate | | | ota enta | al | Bala pro bein pro cultiv | et du g t fit | ce he of |
| | A. | g. | Rs. | a. | Ρ. | Rs. | a. | Ρ. | Rs. | a. | Ρ. | Rs. | a. | P- | Rs. | a. | p. | Rs. | a. | Ρ. | Rs. | a. | p. |
| 1st Black | 28 | 36 | 2 | 8 | 0 | 1 | 6 | 0 | 39 | 11 | 9 | 32 | 8 | 3 | 1 | 12 | 1 | 50 | 11 | 1 | 21 | 8 | 11 |
| 2nd Black | 29 | 15 | 1 | 15 | 3 | 1 | 1 | 3 | 31 | 10 | 9 | 25 | 11 | 2 | 1 | 3 | 6 | 35 | 13 | 0 | 21 | 8 | 11 |
| 3rd Black | 34 | 33 | 1 | 7 | 9 | 0 | 13 | 0 | 28 | 4 | 9 | 23 | 6 | 4 | 0 | 13 | 10 | 30 | 2 | 2 | 21 | 8 | 11 |
| 1st Red | 29 | 13 | 2 | 0 | 6 | 1 | 1 | 9 | 32 | 8 | 6 | 27 | 0 | 7 | 1 | 4 | 9 | 38 | 0 | 2 | 21 | 8 | 11 |
| 2nd Red | 35 | 1 | 1 | 5 | 3 | 0 | 11 | 9 | 25 | 11 | 6 | 20 | 12 | 9 | 0 | 11 | 5 | 24 | 15 | 4 | 21 | 8 | 11 |
| 3rd Red | 40 | 29 | 0 | 14 | 4 | 0 | 7 | 9 | 19 | 11 | 3 | 16 | 12 | 5 | 0 | 5 | 10 | 14 | 14 | 9 | 21 | 8 | 11 |
| 1st Gravelly | 40 | 14 | 1 | 2 | 1 | 0 | 10 | 0 | 25 | 3 | 6 | 20 | 6 | 1 | 0 | 9 | 7 | 24 | 0 | 8 | 21 | 8 | 11 |
| 2nd Gravelly | 40 | 34 | 0 | 13 | 2 | 0 | 7 | 3 | 18 | 8 | 2 | 15 | 1 | 7 | 0 | 4 | 9 | 12 | 0 | 10 | 21 | 8 | 11 |
| 3rd Gravelly | 43 | 33 | 0 | 10 | 0 | 0 | 5 | 6 | 15 | 1 | 0 | 12 | 5 | 3 | 0 | 2 | 2 | 5 | 13 | 4 | 21 | 8 | 11 |
| Total | | | | | | | | | 236 | 7 | 2 | 194 | 0 | 5 | | | | 236 | 7 | 4 | 194 | 0 | 3 |

On the other hand Mr. Williamson contended (2297 of 12th October 1838, Bom. Gov. Sel. CVII. 151 -152) that if, as Lieutenant Nash argued, Government were the universal landlord and the cultivators its servants, it would undoubtedly be unjust to leave one man a greater proportionate share of the fruits of his labour than another. But if the object of an assessment was to impose a land-tax, the plan of taking a certain share of the net produce was the only one by which that tax could be fairly fixed, and it was the only means by which any interest could be created in the land stronger than that local attachment which

the Kunbi had for his fields; nor was the comparatively higher assessment of inferior soils, which was caused by such a system, to be deprecated. According to Mr. Williamson, it is perfectly natural and most profitable for the cultivator that the best soils should be the first cultivated as those which in proportion to the capital and labour employed on them yield the best return, and, when the fiscal arrangements of Government invert this natural order of things, it is a clear proof that there is something radically wrong in the system. Government (4739, 31st December 1838, Bom. Gov. Sel. CVII. 157-158) observed that Mr. Williamson's principle carried to extremity would seem to end in the abolition of all, difference of rate or classification, and the settlement of one uniform rate for land of all qualities. Bom. Gov. Sel. CVII.]

After making every allowance for the chance of mistake through carelessness or error, Lieutenant Shortrede came to the conclusion that so many and such striking errors as he found could be the result only of intentional dishonesty and fraud. [Bom. Gov. Rev. Rec 698 of 1836, 415-418.] So great was the amount of fraud in the portions of the work he had tested that Lieutenant Shortrede came to the conclusion, that, except in its measurements, the results of Mr. Pringle's surrey could never be used as the basis of any revised assessment. In forwarding Lieutenant Shortrede's report Mr. Williamson (16th May 1836) agreed with Lieutenant Shortrede that nothing short of intentional deceit could explain the grievous mistakes which he had brought to light. [Bom. Gov. Rev. Rec. 698 of 1836, 335-371.] In forty-five out of fifty villages the errors were beyond all moderate bounds. Neither the classification nor the rate of assessment had any connection with the colour or qualities of the soil. In several cases the assessment was glaringly unjust. In one place, fields, on which no grain could be raised except after rains so excessive as to make the black soil almost useless, were entered as of the best soil. Soils were found wrongly classed in almost every village. [Bom. Gov. Rev. Rec. 698 of 1836, 336-337.] The errors ran through whole holdings or thals; they were not occasional or accidental but continual and systematic. The holders of alienated or private lands were greatly favoured. The partial manner in which they had been assessed was shown by cases which Lieut. Shortrede had carefully examined and well set forth. A great part of these favoured lands were held by the hereditary village officers. The assessable lands held by the hereditary officers were also recorded in a lower class than they properly belonged to. In several villages Lieutenant Shortrede found that the best land was scarcely ever entered in the best class. In several instances he found that the class at first assigned by the assessor was

fairly correct and had been falsified by the head assessor. In almost every case these deductions had been made in fields belonging to the village officers and rich landholders. [Bom Gov. Rev. Rec. 698 of 1836, 337-3401 Another common error in the survey was the. overassessment of poor lands. These errors were so glaring that they seemed to be wilful. Twenty to a hundred cases of fraud might be produced from any village taken at random. [Bom. Gov. Rev. Rec. 698] of 1836, 340-341.] In prac-tice, Lieutenant Shortrede said, the system of fixing what rent a field could bear by the net produce it yielded, failed because of the difficulty of collecting trustworthy information about net produce. [Lieutenant Shortrede (24th October 1835) says, ' Instead of endeavouring, to ascertain by a detailed calculation in every village the exact value of the net produce of each variety of soil, I should have preferred an assessment founded on a proportion of the gross produce decreasing from the rich to the poor soil.' Bom. GOV. REV. Rec. 698 of 1836, 459-462. On these reports Government unwillingly came to the conclusion that Mr. Pringle's survey and assessment, a work of great labour and enormous expense, which was originally looked to with sanguine expectation, must finally be set aside. Government acquiesced in the Revenue Commissioner's opinion and were satisfied that the survey and assessment were unfit to be made the basis of any revision. [The faults in Mr. Pringle's settlement are given by Lieutenant Nash and Lieutenant Wingate in Bom. Gov. Sel. CVII. 12.16, 108-109, 125-130, 138-140, or CLI. 10-13, 88-89, 103-108, 114-116; Mr. Mills, Principal Collector, 20th Septem ber 1838, Bom. Gov. Sel. CVII. 142 or CLI. 118; Colonel Francis in Bom. Gov. Sel. CVII. 11, 16 or CLI. 10, 13; Mr. Williamson the Rev. Comr. 2297 of 12th October-1838, Bom. Gov. Sel. CVII. 151-152; and Gov. Letter 4739 of 31st December 1838, Bom. Gov. Sel. CVII. 157-158.] A fresh revision of the assessment was urgently called for. Considering the miseries which the people suffered from heavy and unequal assessment, every day and every hour of delay was an evil. In regard to the mode of effecting the revision the only general rule which Government could lay down was, that a patient searching and accurate inquiry must be made into the individual nature and capabilities of every acre of soil which the survey included. In such a case no abstract or general principle could be applied. Government hoped that under the management of the Revenue Commissioner Mr. Williamson, the present revision would be successful. Besides the talents and information that could now be brought to the work, the agents had learned much from past errors. Every step they took would be founded on experiment and must lead to improvement. Government determined that under the general superintendence and direction of the Revenue Commissioner the work of survey and assessment should

in each subdivision or taluka be carried on by the Collector or the assistant collector who might be in charge of it aided either by an engineer officer or any other competent military officer. In the Poona collectorate the military officers were to be distributed according to the following arrangement. Lieutenant Wingate was to survey Mohol and Madha under Mr. Goldsmid; Lieutenant Nash was to survey Indapur under Mr. Goldsmid according to the system introduced by Mr. Goldsmid and Lieutenant Wingate; Lieutenant Shortrede was to have charge of Bhimthadi in addition to Purandhar and was to have Lieutenant Gaisford as an assistant; Lieutenant Calland was to survey Khed and Maval; Ensign Diggie was to survey Junnar and Pabal; Lieutenant Hart was to survey Sholapur; and two other officers were nominated to survey Barsi and Haveli. Of the sub-divisions named in the text, Mohol, Madha, Sholapur, and Barsi are nOW (1884) in Sholapur; and Indapur, Bhimthadi, Purandhar, Khed, Maval, Junnar, Pabal, and Haveli in Poona. To render the proposed arrangement for surveying and revising the assessment fully available and beneficial, Government impressed on all officers concerned the necessity of harmony in work and of unity in system. [Gov. Letter 3024 of 3rd Nov. 1836, Bom. Gov. Rev. Rec. 698 of 1836,483-492.]

1836-37.

Except in Junnar the 1836 rainfall seems on the whole to have been favourable. Of the total remissions of £16,503 (Rs. 1,65,030), £13,110 (Rs. 1,31,100) were granted on account of bad crops and £3393 (Rs. 33,930) for other causes. The details of remissions on account of bad crops are: Sholapur and Barsi Rs. 260, Mohol and Madha Rs. 1300, Haveli and Bhimthadi Rs. 24,170, Khed and Maval Rs. 17,120, Shivner or Junnar and Pabal Rs. 78,900, Purandhar Rs. 6830, Indapur Rs. 2480, and Poona City Rs. 40, total Rs. 1,31,100. Of the total land revenue £119,452 (Rs. 11,94,520) were collected and £6954 (Rs. 69,540) were left outstanding by the end of August 1837. In the nine Poona sub-divisions eight new wells were built and twenty-eight old wells were repaired. Markets were established in several villages. [The Collector Mr. Mills, 12th January 1838, Poona Collector's Compilation, Jamabandi Reports, 1836-38.] In April 1837 the Collector Mr. Mills drew attention to the great loss and hardship caused by the levy of customs and transit duties. He was of opinion that the abolition of the transit duties would give much relief to the agricultural and manufacturing classes. Transit duties caused great trouble and annoyance to trade and many difficulties to husbandmen in disposing of their produce. They were one cause of their poverty and of the decline of the land revenue. Mr. Mills recommended that these duties

should be abolished. So long as they existed, neither trade, manufactures, nor agriculture could flourish. This opinion of Mr. Mills had the support of Lieutenant, afterwards Sir George Wingate, who held that the transit duties were one of the chief causes of the husbandmen's poverty. The holders of land would hail the abolition of transit duties as one of the greatest boons. [Mr. Mills, Principal Collector, 25th April 1837, Bom. Gov. Rev. Rec. 772 of 1837, 32-34.] Transit duties were abolished in September 1837. [Lieutenant Evans in Purandhar Survey Report, 13 of 18th Feby. 1847 para, 10 In consequence of most elaborate and vigorous protests from Mr. Davies in 1836 transit duties were abolished in Thana. Bombay Gazetteer, XIII. 581.]

Survey, 1836-1838.

The chief measure connected with the administration of the land in 1836-37 was the introduction of the thirty years' revenue survey settlement into the Kalas petty division of Indapur. Apart from the ruinous element of fraud in Mr. Pringle's survey in Indapur, the general failure of the 1829 harvest had altered the character of his settlement and filled, the revenue accounts with confusion and uncertainty. [Bom. Gov. Rev. Rec. 666 of 1835, 9-12. Bom. Gov. Sel. CVII. 16-17.] Between 1829 and 1834 the Indapur husbandmen suffered grievously from the frauds of the village officers and under Government servants. The stoppage of or at least the great reduction in these abuses in 1834 and a change for the better in the seasons improved the condition of Indapur. The revenue returns for the three years ending 1835-36 show average receipts amounting to £6145 (Rs. 61,450) or an increase of £4450 (Rs. 44,500) on the corresponding receipts in the three years before 1833-34. [The details are:

Indapur Revenue, 1826-1836.

| YEAR. | Rental. | Remissions. | Outstandings. | Collections. |
|---------|----------|-------------|---------------|--------------|
| | Rs. | Rs. | Rs. | Rs. |
| 1826-27 | 79,197 | 12,810 | 3175 | 63,212 |
| 1827-28 | 68,334 | 41,947 | 4373 | 22,015 |
| 1828-29 | 74,688 | 232 | 13,613 | 60,843 |
| 1829-30 | 1,05,705 | | 84,408 | 21,297 |

| 1830-31 | 64,130 | 48,550 | 2693 | 12,887 |
|---------|--------|--------|--------|--------|
| 1831-32 | 73,200 | 52,124 | 273 | 20,803 |
| 1832-33 | 75,502 | 57,969 | 371 | 17,162 |
| 1833-34 | 83,079 | | 21,989 | 61,080 |
| 1834-35 | 70,932 | 6207 | 3643 | 61,082 |
| 1835-36 | 74,550 | 12,162 | 201 | 62,187 |

In February 1867 (Bom. Gov. Sel. CVII. 21 or CLL 18) Colonel Francis wrote that Mr. Goldsmid Introduced his Indapur settlement when the revenue of the sub-division'was falling and cultivation decreasing and when there were heavy outstand-ins balances. This does not agree with the above statement of the Indapur revenues which Colonel Francis gives in para 30 of the same report The statement shows that Indapur began to mend from 1833-34 not from 1836-37.]

It was under these comparatively favourable circumstances that, with the assistance of Lieutenant Wingate, Mr. Goldsmid in-troduced a revised survey and assessment in the Kalas petty division of Indapur in 1836. [Bom. Gov. Sel. CVII. and CLI] Mr. Goldsmid proposed that every field should be examined and the quality of its soil and the advantages or disadvantages of its situation determined. Government were anxious that the measurements of Mr. Pringle's survey should form the basis of the new settlement. The former measurements were accordingly in each case tested: Where the error was less than ten per cent the old measurements were kept and if necessary corrected; where the errors were so great as to be likely to vitiate the assessment the whole village was re-measured. As regards the classing of soil Mr. Goldsmid proposed to arrange the dry-crop or jirayat lands under the three heads of good or uttam, middle or madhyam, and bad or kanishth. It was in his rules for classing the soil that Mr. Goldsmid's system showed itself most superior to Mr. Pringle's system. Under Mr. Pringle's system so many considerations were left to the decision of the classer, the quality of the soil, its position, and its advantages, that it was impossible to have any uniformity in the classing of soils and it was impossible to test the care or the honesty of the classer. Mr. Goldsmid rejected the whole of the former classing. The attention of the classers was directed entirely to the quality of the Boil of each field. The classer had nothing to do with any other considerations. [Bom. Gov. Sel. CVII. 28; Mr. Goldsmid, Surv. Supt 47] of 1st Nor. 1840 paras 66-67, Bom. Gov. Sel. CXXX.] All other considerations belonged to the question of the assessment not to the

question of the class of land. Even after confining the classer's attention to the quality of the soil it turned out in practical working that to determine the quality of the soil of a field required a much more elaborate arrangement than the original rough grouping into good, middle, and bad. To meet this difficulty Mr. Goldsmid and Lieutenant Wingate devised a plan of arranging the soil under three main groups according to colour, black red and yellow, and of dividing each of the three main groups into three grades or classes, that is into nine grades in all [Bom. Gov. Sel CVII. 23-24, 29-30; Lieut. Davidson, 1st Sept 1840 para 2, Bom. Gov. Sel. CXXX.] A value was assigned to each of the nine grades, twelve annas or 34ths being the highest and two annas or one-eighth being the lowest. As regards the dry-crop rates Mr. Goldsmid suggested an alternative scale, for good lands either two or three acres to the rupee of assessment; for middle lands either three or four acres; and for poor lands either four or five acres. He was strongly in favour of the lower scale of rates. If the higher scale was adopted he thought that in a tract which suffered so greatly from uncertain rainfall frequent remissions would continue necessary. [Bom. Gov. Sel. CVII. 24.] It was at first proposed that the settlement should last for ten years instead of for one year and the period was afterwards lengthened from ten to thirty years. [Bom. Gov. Sel. CVII. 24, 25, 33,35.1 Of the seventy-three and a half Government villages of Indapur, the villages forming the Kalas group were settled in 1836-87 and the rest in 1837-38. [There were besides two and a half villages which were settled in 1845, Bom, Gov. Sel. CVII, 29.1 The following statement shows the tillage and revenue of the Indapur sub-division between 1818-19 and 1836-87:

Indapur Tillage and Revenue, 1818-1837.

[The Indapur sher is larger than the Poona sher; the Poona sher is more than double the Bombay sher (Lieut. Nash, 1838); 216,000 bighas nearly equal 182,000 acres. Bom. Gov. SeL CVII. 118, 120, 121; CLI. 96.]

| YEAR. | VILLAGE. R. <i>Bighas.</i> Acres. | | Ain Jama | Sayar | Total | Remissions. | |
|-------------|--------------------------------------|--|-----------|----------------|----------|-------------|--|
| TEAK. | | | Ain Jama. | Sayar Jama. | Total | | |
| | | | Rs. | Rs. | Rs. | Rs. | |
| 1818- 19 | 215,911 | | 1,30,782 | 1533 | 1,32.315 | | |

| 1819- 20 | 210,532 | | 1,56,191 | 6300 | 1,62,491 | |
|-------------|---------|---------|----------|--------|----------|--------|
| 1820- 21 | 203,446 | | 1,38,988 | 6645 | 1,45,653 | 20 |
| 1821- 22 | 210,968 | | 1,49,024 | 10,109 | 1,59,138 | 1129 |
| 1822- 23 | 177,197 | | 1,34,150 | 8403 | 1,42,553 | 6655 |
| 1823- 24 | 173,896 | | 1,43,485 | 9107 | 1,52,592 | 93,877 |
| 1824- 25 | 148,562 | | 1,23,321 | 9436 | 1,32,757 | 94,121 |
| 1825- 26 | 126,544 | | 65,398 | 5344 | 70,742 | 9100 |
| 1826- 27 | 200,905 | | 77,855 | 6998 | 83,953 | 13,509 |
| 1827- 28 | 159,273 | | 67,111 | 5711 | 72,842 | 42,602 |
| 1828- 29 | 157,754 | | 73,358 | 5536 | 78,894 | 232 |
| 1829- 30 | | 126,050 | 1,03,653 | 6168 | 1,09,821 | |
| 1830- 31 | | 132,416 | 63,806 | 5438 | 69,244 | 7 |
| 1831 32 | | 130,671 | 71,770 | 5291 | 77,061 | 53,522 |
| 1832- 33 | | 134,564 | 74,035 | 5488 | 79,523 | 59,523 |
| 1833- 34 | | 150,604 | 81,502 | 6031 | 87,543 | 10 |
| 1834- 35 | | 126,310 | 69,601 | 6040 | 75,641 | 6400 |
| 1835- 36 | | 131,707 | 73,144 | 8103 | 81,247 | 12,578 |
| 1836- | | 159,900 | 73,212 | 7078 | 80,290 | 6156 |

| 37 | | | |
|----|--|--|--|
| | | | |

continue.

| | | | | | RUPEE I | PRICES. |
|-------------|---------|-----------------|---------------|------------|---------|---------|
| YEAR. | Claims. | For Collection. | Outstandings. | Collected. | | |
| | | | | | Jvari. | Bajri. |
| | Rs. | Rs. | Rs. | Rs. | Shers. | Shers. |
| 1818- 19 | 22,178 | 1,10,137 | 11,249 | 98,888 | 17 | 15½ |
| 1819- 20 | 34,064 | 1,28,427 | 6834 | 1,21,593 | 19½ | 12¼ |
| 1820- 21 | 21,901 | 1,28,732 | 4261 | 1,19,471 | 32 | 16 |
| 1821- 22 | 24,354 | 1,33,650 | 4593 | 1,29,057 | 32 | |
| 1822- 23 | 27,180 | 1,08,718 | 71,753 | 36,965 | 32 | 24 |
| 1823- 24 | 26,334 | 32,-381 | 13,049 | 19,332 | 36¾ | 23 |
| 1824- 25 | 29,560 | 9076 | 2771 | 6305 | 12½ | |
| 1825- 26 | 17,785 | 43,857 | 4920 | 38,937 | 44 | 34 |
| 1826- 27 | 19,890 | 50,554 | 3824 | 46,730 | 64 | |
| 1827- 28 | 15,340 | 14,900 | 6154 | 8746 | 32 | |
| 1828- 29 | 18,647 | 60,015 | 16,653 | 43,362 | 80 | 68 |
| 1829- 30 | 17,443 | 92,378 | 44,358 | 48,020 | 46 | |
| 1830- 31 | 17,910 | 51,327 | 43,206 | 8121 | 40 | 381/2 |

| 1831- 32 | 11.637 | 11,902 | 558 | 11,344 | 60 | 35 |
|-------------|--------|--------|--------|--------|----|----|
| 1832- 33 | 9146 | 10,854 | 997 | 9857 | 23 | 36 |
| 1833- 34 | 27,965 | 59,568 | 23,933 | 35,635 | 46 | 34 |
| 1834- 35 | 22,634 | 46,607 | 4955 | 41,652 | 48 | 44 |
| 1835- 36 | 21,864 | 46,805 | 1327 | 45,478 | 38 | |
| 1836- 37 | 23,533 | 50,601 | 402 | 50,199 | 66 | 49 |

The effect of the rates introduced by Mr. Goldsmid and Lieutenant Wingate was to reduce the *jamabandi* or rent settlement from £9903 (Rs. 99,030) in 1836-37 to £7279 (Rs. 72,790) in 1837-38 or 26 per cent. [Bom. Gov. Sel. CVII. 36.] This rental of 1837-38 was not much lower than the average settlement £7545 (Rs. 75,450) in the five years before 1836-37. [Bom. Gov. Sel CVII. 21.]

This survey and settlement of Indapur has the special interest of being the first application of the union of wise principles and ingenious practical devices, which has since become so well known and so widely adopted under the name of the Bombay Revenue Survey system. The new settlement was gradually introduced group after group into all the villages of the Poona district, the work ending with the settlement of the Mayals in 1853-54.

Survey, 1836-1854.

The following statement gives the survey rates introduced into the different groups between 1836 and 1854 [Bom. Gov. Sel. LXX. 88. Four hundred *res* make a rupee or two shillings. The highest drycrop survey acre rates in Khed were Rs. 15%, Rs. 11/2, Rs.13% Rs. 1 1/4, and Re. 1, and in Maval Rs. 11/2, Rs. 13%, Rs. 11/4, and Re. 1. Bom. Gov. Sel. LXX. 4; Bom. Gov. Rev. Rec. 172 of 1853, 107.]:

Poona Highest Dry-crop Survey Acre Rates, 1836-1854.

| GROUPS. BLACKS. REDS. | GROUPS. | BLACKS. | REDS. |
|-----------------------|---------|---------|-------|
|-----------------------|---------|---------|-------|

| | First. | Second. | Third. | Fourth. | First. | Second. | Third. | Fourth. |
|-------------------|--------|---------|--------|---------|--------|---------|--------|---------|
| | Res. | Ret. | Res. | Res. | Ret. | Ret. | Res. | Res. |
| Indapur | 300 | 240 | 170 | | 220 | 130 | 75 | |
| Kalas | 300 | 240 | 170 | | 220 | 130 | 90 | |
| Baramati | 330 | 265 | 185 | | 220 | 145 | 80 | |
| Bhimthadi | 375 | 300 | 230 | | 260 | 180 | 130 | |
| Kurkumb | 330 | 265 | 185 | | 220 | 145 | 100 | |
| Pabal | 490 | 200 | 270 | | 220 | 220 | 120 | |
| Ausari | 490 | 390 | 270 | | 320 | 230 | 130 | |
| Haveli | FFO | 450 | 250 | 250 | 475 | 275 | 275 | 175 |
| Donja | 550 | 450 | 350 | 250 | 475 | 375 | 275 | 175 |
| | 450 | 372 | 264 | | 312 | 228 | 156 | |
| Purandhar | 394 | 325 | 231 | | 273 | 199 | 136 | |
| | 356 | 295 | 209 | | 247 | 181 | 124 | |
| Cura | 345 | 275 | 195 | | 230 | 155 | 85 | |
| Supa | 330 | 265 | 185 | | 220 | 145 | 80 | |
| | 580 | 470 | 330 | | 450 | 325 | 175 | |
| Bori | 490 | 390 | 270 | | 350 | 250 | 130 | |
| | 390 | 310 | 220 | | 260 | 180 | 110 | |
| | 650 | 530 | 390 | | 500 | 360 | 187 | |
| Dun hanner at the | 600 | 480 | 340 | | 450 | 310 | 150 | |
| Brahmanvadi | 480 | 384 | 272 | | 320 | 208 | 120 | |
| | 390 | 312 | 221 | | 260 | 169 | 97 | |

continue.

| GROUPS. | GRAV | ELLY OR | BARAD. | ALLUVIAL OR Dheli and Kevtal. | | | | |
|---------|--------|---------|--------|----------------------------------|---------|--------|--|--|
| | First. | Second. | Third. | First. | Second. | Third. | | |

| | Res. | Res. | Res. | Res. | Ret. | Res. |
|-------------------|------|------|------|------|------|------|
| Indapur | 100 | 60 | 35 | 800 | 700 | |
| Kalas | 75 | 45 | 35 | | 1 | |
| Baramati | 110 | 65 | 40 | 380 | 285 | |
| Bhimthadi | 165 | 100 | 60 | | | |
| Kurkumb | 110 | 65 | 40 | 400 | | |
| Pabal | 180 | 100 | 60 | 650 | 600 | |
| Ausari | 160 | 100 | 60 | 030 | 600 | |
| Haveli | 240 | 140 | 60 | | | |
| Donja | 240 | 140 | 60 | | | |
| | 192 | 120 | 78 | | 1 | |
| Purandhar | 168 | 105 | 68 | | 1 | |
| | 152 | 95 | 62 | | 1 | |
| Curr | 115 | 70 | 40 | | 1 | |
| Supa | 110 | 65 | 40 | 380 | 285 | 285 |
| | 210 | 120 | 70 | 700 | 650 | |
| Bori | 180 | 100 | 60 | 650 | 600 | |
| | 140 | 80 | 50 | 500 | 390 | |
| | 250 | 150 | 87 | | | |
| Dun hannan (= d: | 200 | 120 | 70 | | | |
| Brahmanvadi | 160 | 95 | 56 | | | |
| | 130 | 78 | 45 | | | |

The following statement shows that in the seventeen years ending 1854 during which the revenue survey system was being introduced into the Poona district the tillage area spread from 895,438 acres in 882 villages in 1839-40 to 1,368,430 acres in 941 villages in 1853-54 and the collections rose from £63,612 (Rs. 6,36,120) in 1837-38 to £72,476 (Rs. 7,24,760) in 1853-54. The details are:

Poona Tillage and Revenue, 1837-1854.

| YEAR. | INDA'PUR MILLET RUPEE PRICES. | | Villages. | Tillage. | Remissions. | Out- standings. | Collections. |
|-------------|--|--------|-----------|-----------|-------------|--------------------|--------------|
| | Jvari. | Bajri. | | | | | |
| | Shers. | Shers. | | Acres. | Rs. | Rs. | Rs. |
| 1837- 38 | 36 | 44 | 882 | | 72,410 | 45,745 | 6,36,124 |
| 1838- 39 | 67 | 30 | 882 | | 1,86,263 | 19,204 | 5,48,115 |
| 1839- 40 | 44 | 30 | 882 | 895,438 | 1,06,399 | 4944 | 6,70,966 |
| 1840- 41 | 64 | 44 | 883 | 947,840 | 99,262 | 17,503 | 6,82,792 |
| 1841- 42 | 56 | 40 | 889 | 982,600 | 1,20,314 | 24,408 | 6,42,961 |
| 1842- 43 | 68 | 42 | 8921/2 | 1,000,881 | 26,937 | 9635 | 7,69,580 |
| 1843- 44 | 72 | 44 | 9001/2 | 1,055,282 | 42,917 | 4498 | 7,44,422 |
| 1844- 45 | 60 | 36 | 933 | 1,063,127 | 92,395 | 33,321 | 6,89,399 |
| 1845- 46 | 36 | 25 | 938 | 1,102,088 | 1,05,947 | 27,983 | 6,88,837 |
| 1846- 47 | 15 | 13 | 937 | 1,148,755 | 19,283 | 22,473 | 8,16,606 |
| 1847- 48 | 48 | 32 | 839 | 1,228,304 | 24,622 | 7176 | 8,18,451 |
| 1848- 49 | 72 | 56 | 940 | 1,227,898 | 40,610 | 11,838 | 7,75,355 |
| 1849- 50 | 72 | 56½ | 940 | 1,196,719 | 31,483 | 10,759 | 7,62,429 |
| 1850- | 38 | 34 | 937 | 1,215,015 | 51,961 | 4168 | 7,30,324 |

| 51 | | | | | | | |
|-------------|----|----|-----|-----------|--------|------|----------|
| 1851- 52 | 40 | 32 | 942 | 1,273,394 | 28,352 | 3258 | 8,04,623 |
| 1852- 53 | 56 | 40 | 942 | 1,816,767 | 7278 | 452 | 8,00,721 |
| 1853- 54 | 56 | 36 | 941 | 1,368,430 | 82,942 | 2498 | 7,24,762 |

1835-1844.

Of other measures which combined with the revenue survey to improve the district during this period, the introduction of petty divisional officers or mahalkaris between 1835 and 1838, and the abolition of transit dues in 1837 have been noticed. The repeal of cesses under Act XIX. of 1844, and the spread of public works also did much to improve the state of the district. The appointment of mahalkaris [For details see Bom. Gov. Rev. Rec. 666 of 1835.] or petty division officers subordinate to mamlatdars or sub-division officers in Poona and other Deccan districts about 1835 was the work of the Revenue Commissioner Mr. Williamson. The repeal of cesses under Act XIX. of 1844 had the evil effect of freeing from taxation large classes of traders who profited more than any section of the community by the English maxims of government, and who were among the best able to pay of the whole population. At the same time it no doubt proved a relief and caused an increase of wealth. The introduction of public works especially of roads greatly enriched the district. It gave much-wanted employment to husbandmen when field work was slack; it opened markets for field produce, and by cheapening the cost of carriage added to the value of exports and lowered the price of imports.

1837-38.

The season of 1837 was very unfavourable. In November 1837 throughout the district a heavy and untimely fall of rain caused serious damage both to the standing crops and to the stacked corn, At Indapur the rupee price of Indian millet or *jvari* rose from about 86 to 72 pounds (43-36 *shers*). In the whole district £12,566 (Rs. 1,25,660) or 13 per cent of the land revenue were remitted and about eleven per cent-left outstanding. [Bom. Gov. Rev. Rec. 974 of 1839, 54, 197-198.] The net revenue showed a fall of £13,050 (Rs. 1,30,500). This decrease was chiefly due to the abolition of town and transit duties,

the discontinuance or modification of objectionable taxes, and a fall in the amount of judicial receipts. [Bom. Gov. Rev. Rec 974 of 1889,1, 22, 214.] In January 1838 Mr. Mills, the Collector, observed that the general poverty of the landholders was well known to Government. He hoped that the introduction of superior product, the revision of the assessment, and the abolition of transit duties and other taxes which fettered the energies of the landholders, would' soon enable them to better their circumstances. [Poona Collector's Compilatioa, Jamabandi Reports, 1836-38, 26.] The introduction of the thirty years' revenue survey settlement into Indapur,

Poona Remissions. 1836-1838.

| SUB- DIVISIONS. | 1837-38. | 1836-37. | Sub- Division. | 1837-38. | 1836-37. |
|--------------------|----------|----------|-------------------|----------|----------|
| | Rs. | Rs. | | Ra. | Rs. |
| Shivner | 4632 | 66,448 | Mohol | 8031 | 2867 |
| Indapur | 4416 | 6156 | Sholapur | 15,935 | 4904 |
| Khed | 13,142 | 17,434 | Barsi | 10,856 | 2515 |
| Pabal | 14,072 | 22,018 | Madha | 17,135 | 8786 |
| Purandhar | 3070 | 6984 | Poona City | 85 | 76 |
| Bhimthadi | 15,599 | 16,473 | Grazing | 114 | |
| Haveli | 12,119 | 10,967 | Total | 125,657 | 171,156 |
| Maval | 6451 | 6526 | | | |

which was begun in 1836, was finished jn 1837-38. The first year (1837-38) of the new rates showed satisfactory results. The area under village had increased in two years (1836-37) by 66,900 acres; [According to another account, the tillage area in Indapur showed an increase from 131,707 acres in 1835-36 to 162,019 acres in 1836-37 and to 189,088 acres in 1837-38. Bom. Gov. Sel. CVII. 120. According to a third statement (Bom. Gov. Rev. Rec. 17 of 1846, 63-66) there was an increase in Indapur in 1836-37 in tillage of 20,073 acres and in revenue of Rs. 5335 and in 1837-38 in tillage of 33,370 acres and in revenue of Rs. 11,402.] the revenue was collected punctually and with ease; there were no outstandings, and fewer remissions. That this improvement was in great measure due to the new settlement was

shown by the fact that no similar improvement had occurred in other parts of Poona. [Mr. Mansfield, assistant collector, 27th November 1838, Bom. Gov. Rev. Rec. 974 of 1839, 188-190. Mr. Mansfield who had charge of Bhimthadi and Indapur and whose opinion as regards the result of the survey settlement in Indapur has been given in the text, writes in the same report (about 1837-38): 'The late heavy rain that fell in November was the source of much distress to the landholders of the *subha* or mamlatdar's division of Bhimthadi in which early or *kharif* crops alone are cultivated while in the Kurkumh petty division where *rati* is the chief product, there were better crops than have been known for several years. The distress above alluded to entailed the necessity of making large remissions which though smaller than those granted the year before (1836-37), were larger than ought ever to be given if the sub-division were lightly and equitably assessed. But as this is very far from being the case in this sub-division in which the villages even in proximity to Poona, which it would have been supposed would have been very flourishing, are halfuncultivated and the cultivators most wretchedly poor, the remissions were made liberally on the ground that it is better to-remit than to allow a balance to remain which may not be paid for years, and perhaps not at all. The decrease in land cultivation, notwithstanding the assistance afforded by Government in advances or tagai, the abolition of the transit duties and other vexatious and oppressive taxes, is a forcible example of over-assessment. The mamlatdar of Bhimthadi represented that unless some immediate relief were afforded by reducing the assessment, a further decrease would take place. As there was no establishment capable of making an inquiry into the inequality of assessment, and Lieutenant Nash had begun the survey in the Kurkumb petty division, I issued an order that those who wished to take up fresh land should be assessed only at 12 as. or three-fourths of the survey rates, which measure has been attended by the beneficial result of 15,000 acres of fresh cultivation. The same rain that caused so much distress in Bhimthadi proved of signal benefit in Indapur and notwithatanding the entire failure of the kharif crop the remissions granted are of less amount than they ever have been. This however might have been expected as the result of the introduction of the new survey. But I bring it prominently to notice as the obviating the necessity of granting remissions was one of the reasons specified for lightening the assessment; if is also pleasing to be able to record that that object has been partly attained.' Mr. Mansfield, assistant collector, 29th November 1838, Bom. Gov. Rev. Rec. 974 of 1839, 178-182, 187-188.]

The season of 1838-39 was again very unfavourable. In some parts of the district rain almost entirely failed. At the same time the rupee price of Indian millet fell at Indapur from about 72 to 134 pounds (36-67 shers). In the whole district £18,626 (Rs. 1,86,260) or about 24½ per cent of the land revenue were remitted. [About 7½ per cent in the settled sub-division of Indapur, 431/2 per cent in the unsettled subdivision of Shivner or Junnar, and 22½ per cent in the unsettled subdivision of Bhimthadi. Bom. Gov. Rev. Rec. 1098 of 1840, 99. In this year (1838-39) the Sholapur sub-divisions of Sholapur, Barsi, Mohol, and Madha were separated from Poona and included in the charge of the Collector of Sholapur, Poona now comprised 882 Government villages forming nine sub-divisions: Shivner 173, Indapur 74½, Khed 182, Pabal 57, Purandhar 67½, Bhimthadi 69, Haveli 82, Maval 176, Poona City 2. Bom. Gov. Rev. Rec. 1098 of 1840, 3, 19, 26] The collections amounting to £54,811 (Rs. 5,48,110) showed a fall of £8800 (Rs. 88,000) or about fourteen per cent. The outstandings amounted to £1920 (Rs. 19,200). In Indapur, since the introduction of the 1836 survey, about 68,000 acres had been brought under tillage. [Bom. Gov. Sel. CVII. 32, 36. According to another statement, in Indapur in this year (1838-39) tillage showed an increase of 15,555 acres and revenue of Rs. 3073, and in Kurkumb tillage of 11,072 acres and revenue of RS, 1956, Bom, GOV, Rev. Rec. 17 of 1846, 63-66.] In November 1838 the Revenue Commissioner Mr. Williamson noticed that the introduction into Poona of the mahalkari system, and the separation of the Sholapur sub-collectorate had done much to improve the revenue management of Poona. The great want now was the revision of the survey. Though much remained to be done village accounts had greatly improved. The remission of town duties and advances to build shops and repair wells and village offices had done much to improve Supa, Kalas, Mohol, and Sholapur, and the city of Poona had benefited by the remission of taxes and the repair of roads. [Mr. Williamson, Rev. Comr 2610 of 23rd November 1838.]

SURVEY. Bhimthadi, 1838-39.

In this year 1838-39 the thirty years' revenue survey settlement was introduced into the Kurkumb petty division of Bhimthadi [Bom. Gov. Sel. CLI. 228.] Bhimthadi was a long narrow belt, chiefly on the left bank of the Bhima, stretching from near Poona to the borders of Indapur. It included two divisions which differed greatly in climate. In the west the Pimpalgaon division, under the mamlatdar, enjoyed a much more certain and abundant supply of rain than the eastern division under the mahalkari of Kurkumb. The climate, soil, and productions of Kurkumb were in every respect similar to those of

Indapur. The chief feature of its climate was scanty uncertain rainfall, and its chief produce was Indian millet or *ivari*. Pimpalgaon enjoyed a considerable rainfall, yielded *bajri*, and was near Poona the chief grain mart in the country. Survey rates were introduced into Kurkumb in 1838-39 and into Pimpalgaon in 1839-40. The horror of Holkar's wasting march in 1802 and the failure of rain and famine of 1803 had wiped out the memory of all older sufferings. The country had scarcely recovered when it passed to the British. Soon after, and probably in the mind of the people because of the Peshwa's overthrow, a plague of cholera swept away a large proportion of the people. During the three years after the Peshwa had been driven from Poona, in the village of Kurkumb out of 1000 people 460 died. Then came the ruinous fall in the price of grain from the spread of tillage, the decline in capital, and the fall in the numbers of the local non-agricultural classes. The failure of rain in 1823, 1824, 1827, 1829, 1830, and 1832 had combined to reduce Kurkumb to a deplorable state.. The earliest year for which local information was available was 1832-33. In that year, as in Indapur a succession of bad years joined with cheap grain had reduced the people to wretchedness and made large remissions necessary, the allotting of which had to be left in great measure to low paid clerks with little supervision. From a nominal or kacha rental of £7187 (Rs. 71,870) of the whole Bhimthadi subdivision, £5482 (Rs. 54,820 had to be taken because of remissions, and £462 (Rs. 4,620) because of village expenses, leaving to Government only £1243 (Rs. 12,430)

The land seems to have been very unequally assessed; the average acre rate for dry-crop was 1s. 65/8d. (12 5/12 as.) and for garden 8s. (Rs. 4) besides the dry-crop rate. The people had come to look on remissions as their right. [Lieutenant-Colonel Waddington, Survey Superintendent, 12th July 1871, Bom. Gov. Sel CLI, 201. In 1838-39 Lieutenant Nash the survey officer was at a loss how to convey an impression of the poverty of the Bhimthadi villages; more than half the arable land was waste, the villages were ruined, constant remissions were required, and outstandings accumulated. [Bom. Gov. Sel. CLI. 199, 233. At the same time as in Indapur the statement (Sel. CLL 203) of revenues for forty-eight villages of the Bhimthadi subdivision shows a considerable improvement since the year 1833-34. The average collections during the three years before 1833-34 were Rs. 16,360 and in the six years after 1833-34 Rs. 31,570, and in the three last of these six years Rs, 34,350. Of a total of 191,000 arable acres 106,000 or more than one-half were waste. A portion of this waste was covered with thick thorny bushes, which it would be difficult to clear. The village walls were crumbling and falling, and for one inhabited house two were empty and of many only the open sites

remained. [Bom. Gov. Sel. CLI. 233.] The conditions of the Kurkumb group, the soil, climate, style of tillage, and price of grain so closely resembled Indapur that Lieutenant Nash proposed to introduce the same rates. On account of their greater nearness to Poona Lieutenant Wingate suggested an increase of ten per cent and these revised rates were approved and introduced. [Gov. Letter 4619 of 24th December 1838. Bom. Gov. Sel. CLL 228, 239.]

1839-40.

In February 1840 Mr. Stewart the Collector remarked that where the new survey rates had been introduced, nearly all the land had been taken up. In many instances the landholders continued to take up land they were unable to cultivate and used it for grazing rather than risk being deprived of it by others. Where the old rates prevailed, much good land was still waste. This could be brought under tillage only by a reduction in the assessment. [Bom. Gov. Rev. Rec. 1098 of 1840, 19-20. In 1839-40 the latter rains almost entirely failed and the late crops suffered severely. At Indapur the rupee price of Indian millet or *jvari* rose from about 134 to 88 pounds (67-44 shers). In the Kurkumb division of Bhimthadi there was an increase of 14,537 acres which was carried out by the landholders with their own capital. Mr. Stewart, Collector, 19th November 1840, Bom. Gov. Rev. Rec. 1241 of 1841, 68, 69. In Indapur tillage increased by 5625 acres, and revenue by Rs. 1526; in Bhimthadi the increase was 17,490 acres under tillage and Rs. 7458 under revenue. Bom. Gov. Rev; Rec. 17 of 1846, 63-66.] In the whole district the area under tillage was 895,438 acres; and though £10,640(Rs.1,06,400) or about $13\frac{1}{2}$ per cent of the land revenue were remitted. [In the surveyed and settled subdivisions of Indapur and Bhimthadi the remissions amounted to 4½ and 6½ per cent, while in the unsettled subdivisions they ranged from 6 to 20 per cent (Bom. Gov. Bev. Rec. 1241 of 1841, 41). On the 9th of October 1840 Mr. Mansfield, the assistant collector, wrote, 'I am afraid that for long some remissions must be made whenever there is a want of rain. The landholders as a rule are so extremely poor, in consequence of over-assessment and low produce prices, that in a bad year they have not capital enough to enable them to pay the full assessment. Bom. Gov. Rev. Rec. 1241 of 1841, 39, 177.] the collections were £12,280 (Rs. 1,22,800) higher than in the previous year.

In 1839-40 the survey settlement was introduced into the remaining villages of Bhimthadi. [Bom. Gov. Sel. CLI. 239.] They constituted the charge of the mamlatdar at Pimpalgaon. This group was the western division of Bhimthadi. It had passed through the same trials as the

eastern of Kurkumb group which was settled in the previous year, and the condition of its villages and people was very little better. [During the ten years ending 1839-40 in a group of forty-eight Bhimthadi villages which were afterwards brought under revision in 1871, the remissions averaged £1357 (Rs. 13,570) and the collections £2666 (Rs. 26,660). The details (Bom. Gov. Sel. CLI. 202-203) including extra cesses or sayar babs were:

Bhimthadi Revenue, 1830-40.

| YEAR. | Settlement. | Remissions. | Outstandings. | Collections. |
|--------------|-------------|-------------|---------------|--------------|
| 48 Villages. | Rs. | Rs. | Rs. | Rs. |
| 1830-31 | 47,725 | 39,223 | | 8502 |
| 1831-32 | 51,274 | 15,507 | 6037 | 29,730 |
| 1832-33 | 50,377 | 86,954 | 2576 | 10,847 |
| 1833-34 | 57,736 | | 29,633 | 28,103 |
| 1834-35 | 55,208 | 265 | 23,978 | 30,965 |
| 1835-36 | 54,309 | 8417 | 16,766 | 29,126 |
| 1836-37 | 58,927 | 15,040 | 17,592 | 26,295 |
| 1837-38 | 54,926 | 7673 | 13,003 | 34,250 |
| 1838-39 | 50,853 | 9222 | 10,034 | 31,597 |
| 1839-40 | 59,674 | 3373 | 19,106 | 37,195 |
| Average | 54,101 | 13,567 | 13,872 | 26,661 |

]

On the other hand there was a notable difference in the rainfall, the staple products, and the character of the soil. Pimpalgaon enjoyed a considerable rainfall, yielded *bajri*, and was near Poona the chief grain mart in the country. As regards rainfall in the Pimpalgaon group the early south-west rains were more plentiful, certain, and regular than in Kurkumb or Indapur; but the north-east October and November rains were slighter and less certain. As regards crops, in consequence of the difference of rainfall, the chief harvest of the Pimpalgaon group was the early or *kharif* millet or *bajri* and not as in Indapur the late or *rabi* Indian millet or *jvari*. Millet was a more costly crop to grow than Indian

millet. It wanted manure and weeding, did not flourish without rain, and gave a less outturn. On the other hand millet was the food of the richer classes, and in Yevat the chief mart of Pimpalgaon was generally twenty per cent dearer than Indian millet. [Bom. Gov, Sel, CLI. 241.] The details of millet prices are: [Bom. Gov. Sel. CLI. 241, 246, 247.]

Rupee Price of Bajri and Jvari in Shers, 1830-1839.

| Towns. | | Bajri. | | Jvari. | | |
|---------|--------------|--------------------|-----------------|--------------|----------------|-----------------|
| | 1830- 37. | March 1839. | Septr. 1839. | 1830- 37. | March 1839. | Septr. 1839. |
| Indapur | 41 | 31 | 37 5/7 | 52 | 461/3 | 68 |
| Kurkumb | | 24⅓ | 30 | | 36 | 48⅓ |
| Yevat | 29 | 22 | 28 | 38 | 31⅓ | 36¾ |
| Poona | | 18 ² /5 | 25 | | 24 | 29 |

Apart from the fact that its staple millet was a higher priced grain than Indian millet, its nearness to grain markets gave the Pimpalgaon group a considerable advantage over Indapur. During the seven years ending 1837 the average price of Indian millet at Yevat in Pimpalgaon was 27 per cent above the average price of Indian millet in Indapur. Bom Gov. Sel. CL I. 242-243. As regards soil the greater certainty of the rain joined perhaps to some property of the millet plant made the varieties of soil less marked than in Indapur. There was less difference in the outturn of bad and good soils in Pimpalgaon than in Indapur. In Pimpalgaon the best lands were waste and the worst lands were under tillage, partly because the good lands were harder to work but also from some fault in assessment. In fixing the amount by which the Pimpalgaon rates should differ from the Indapur rates no change was required under the heads of condition of the people or cost of tillage. The chief grounds of variation were the better rainfall in the Pimpalgaon group, the greater nearness of the Pimpalgaon group to better markets, and the less difference between the outturn of the different classes of soil in Pimpalgaon than in Indapur. These considerations led Lieutenant Nash to propose for the Pimpalgaon group rates which in the aggregate were thirty-two per cent higher than the rates introduced into Indapur. The Pimpalgaon acre rates were: Black land, 14 as $.4^4/5ps.$, 11 as $.7^1/5 ps.$, and 8 as $.9^3/5 ps.$; red land, 10 as., 7 as., and 5 as. 7 1/5 ps.; brown land, 6 as. 44/5 ps., 4 as., and 2 as. 44/5 ps. The corresponding Indapur rates were: Black

land, 12 as., 9 as. 7¹/5., and 7 as.; red land, 8 as., 5 as. 2²/5 ps., and 3 as. $7^{-1}/5ps.$; brown land, 4 as., $2 as. <math>4^{4}/5ps.$, and $1 a. 4^{4}/5 ps.$ Bom. Gov. Sel. CLI. 151, 244. In the Pimpalgaon group there were 123,000 acres. The proposed rates averaged 11 3/4 d. (75/6 as.) the acre, and the new assessment was expected to vary from £5700 to £6300 (Rs. 57,000 - Rs. 63,000). The old assessment was £11,600 (Rs. 1,16,000) and the Government receipts for the two years before the revision of the survey were £3300 (Rs. 33,000)-and £2900 (Rs. 29,000). If the reduction of rates caused the same spread of tillage as in Indapur, an increase of 47,000 acres in tillage and of at least £1000 (Rs. 10,000) in collections was expected. [Bom. Gov. Sel. CLI. 245-246. In the Kurkumb group there were 98,764 acres. Their old assessment was £7055 (Rs, 70,550) and their new assessment £3700 (Rs. 37,000) representing an average acre rate of 9¾. (6½as.). Indapur contained 220,000 acres; its old assessment was £20,300 (Rs. 2,03,000) and for many years the average revenue had been only £3200 (Rs. 32,000). The average acre rate imposed by Mr. Goldsmith was 8%. ($5^{11}/12$ as.); this reduced the assessment to £8400 (Rs. 84,000); while an extension of cultivation consequent am the reduction of assessment increased the revenue to about £5000 (Rs. 50,000), only about oneseventh of the land remaining out of cultivation. Bom. Gov. Sel. CLI. 245.1 On the ground that the difference of produce prices between Indapur and Pimpalgaon was twenty-five per cent in favour of Pimpalgaon, Lieutenant Wingate raised Lieutenant Nash's proposed rates by between four and five per cent. [Bom. Gov. Sel. CLI. 249-261. Lieutenant Wingate's acre rates were first black 1s. 10½d. (15 as.), second black 1s. 6d. (12 as.), and third black 1s. $1^4/5$ (9as. $2^{2}/5ps$.); first red 1s.3³/5d. (10 as. 4⁴/5 ps.), second red $10^{4}/5d$. (7as. $25^{2}/5ps.$), and third red $8^{7}/10d.$ (5as. $9^{3}/5$ ps.); first brown $9^{9}/10d.$ $(6 \text{ as. } 7^{1}/5 \text{ ps.})$, second brown 6d. (4 as.), and third brown $3^{3}/5d$. (2 as.)as, $4^4/5$ ps.). These rates were sanctioned by Government. [Government Letter 130 of 10th January 1840, Bom. Gov. Sel. CLI. 253. In considering the effect of the new rates of assessment Lieutenant Nash anticipated that they would shortly cause an increase of not less than £1000 (Rs. 10,000) a year in the Government revenue, and Lieutenant Wingate thought that the gain to the people by the introduction of the new rates would be still greater. [lieutenant] Wingate, 11th December 1839, Bom. Gov. Sel. CLL. 252.]

1840-41.

In 1840-41 of a revenue of about £80,000 (Rs. 8,00,000) about £10,000 (Rs. 1,00,000) were remitted. In the open country away from the Sahyadris the crops were generally bad. About £9200 (Rs. 92,000)

were remitted in the plain parts of Pabal, Purandhar, Junnar, and Haveli. In Indapur and Bhimthadi the revision of the assessment had lessened the necessity for remissions though the season was not more favourable than in the other eastern sub-divisions. [The details of remissions are: Maval 315 per cent and Khed 172, both unrevised western sub-divisions; Junnar 7.87 an unrevised sub-division partly western partly open, the season unfavourable in the open parts; Pabal 30.02 an unrevised sub-division in the open country, the season unfavourable; Haveli 8.58 and Purandhar 38.66, both unrevised sundivisions partly near the hills partly open, the season unfavourable in the open parts; Bhimthadi 2.50 and Indapur 3.69 both revised subdivisions in the open country, the season unfavourable as in the unrevised open parts. To illustrate the good results of the revised survey settlement still more strikingly, Mr. Vibart the Revenue Commissioner gives the percentage of remissions in the neighbouring sub-divisions of other districts; Korti 36.61 an unrevised sub-division of Ahmadnagar, and Karmala 43.71, an unrevised subdivision of Sholapur. They lay to the north and north-east of Bhimthadi and Indapur the revised sub-divisions of Poona. Bom. Gov. Rev. Rec. 1344 of 1842, 5.6.] At Indapur the rupee price of Indian millet or *jvari* fell from about 88 to 128 pounds (44-64 shers). In the whole district the tillage area increased from 895,438 to 947,840 acres, remissions fell from £10,640 to £9926 (Rs.I,06,400-Rs.99,260), and collections rose from £67,097 to £68,279 (Rs.6,70,970-Rs.6,82,790). Outstandings amounted to £1750 (Rs. 17,500). Of the two revised sub-divisions in Indapur tillage showed an increase of 2194 cress and revenue of Rs. 655, and in Bhimthadi tillage of 21,347 acres and revenue of Rs. 8347. Bom. Gov. Rev. Rec. 17 of 1846, 63.66. Of the total Outstandings of Rs. 17,503, Rs.6262 were in Khed, Rs. 3918 in Indapur, Rs. 2427 in Purandhar, Rs. 2162 in Junnar, Rs. 1825 in Haveli, Rs. 667 in Pabal, Rs. 183 in Poona City and Rs. 59 in Bhimthadi. There were no outstanding in Mayal.] In reviewing the year's report Government observed with satisfaction that the revenue was on the increase, the collections were made more punctually, and the outstanding balances were being settled. Gov. Letter 1494 of 16th May 1842. Bom. Gov. Rev. Rec. 1344 of 1842, 281.]

In 1841 the assistant collector Mr. Hart, writing on the 9th of November spoke highly of the progress made in Indapur and Bhimthadi. Within the last few years population had increased, tillage had spread, the Government revenue had risen, and remissions fallen, and the social and pecuniary condition of the people had perceptibly improved. Mr. Hart considered that this change was in great measure due to the new settlement rates. [Bom. Gov. Rev. Rec. 1344 of

1842,54, 126. Bom. Gov. Sel. CLI. 202. In 1840-41 in Indapur the waste area was reduced to 5160 acres. Bom. Gov. Sel. CVII. 36. About Kurkumb in Bhimthadi the assistant collector Mr. Mansfield wrote about 1841: 'The increase in the land under cultivation in the Kurkumb division, amounting to 14,537 acres assessed at Rs. 5000, is a proof of the great relief afforded to the landholders by the revised rates of assessment; and it is worthy of remark that the whole of this land has been brought into cultivation by the holders on their own means, ungssisted by advances and under a clear understanding that no remission would be made on account of a failure of crops,' Bom. Gov. Sel, CLI. 202. One circumstance which added to the prosperity of the people in 1841 was the abundant supply of cattle. This was probably partly at least due to the change from pack-bullocks to carts which must have set free a large number of bullocks. On the 23rd of December 1841 the Collector Mr. Stewart wrote: 'Bullocks are brought in large droves from the neighbouring states every year to these districts, and cattle markets are held weekly in many large towns. The supply is amply sufficient for the demand. Landholders are never forced to go any distance to buy cattle, nor is any inducement required to persuade the owners of bullocks to bring them for sale in these districts. Mr. Stewart, Collector, 23rd Dec. 1841. Bom. Gov. Rev. Rec. 1344 of 1842, 50.1 In 1840-41 Mr. Hart proposed that remission should be granted to any one who would plant the edges of his field with trees. Mr. Stewart the Collector said it was no use trying to tempt the people as they thought trees spoiled their crops and harboured birds. [Bom. Gov. Sel. CLL. 196.]

Advances, 1842.

A subject which at this time received much attention from revenue officers was the best means of helping landholders by the grant of advances. In 1842 (February 8th) the Revenue Commissioner Mr. Vibart wrote, 'The account of the Government agricultural advances or the *tagai* is on the whole satisfactory. Where the advance is made to effect permanent improvements such as sinking wells, the more that can be advanced the better, provided the improvement proposed is real and permanent and the character and means of the landholder hold out a fair prospect of the undertaking succeeding. Advances to buy bullocks might do good. Still in lightly assessed parts advances for bullocks were open to the objection of tempting landholders to bring more land under tillage than they could cultivate properly. He thought that in lightly assessed districts the grant of advances to buy cattle should be discouraged except after an epidemic of cattle disease or after a famine year.' [Bom. Gov. Rev. Rec, 1344 of 1842,15.17.] In a

letter dated the 16th of May 1842, Government approved of Mr. Vibart's proposals. They said 'In tracts or village groups where the assessment is ill-regulated and the landholders are poor and depressed, it is impossible to resist the call for advances to help in providing seed and stock. As a tract improves, the need, of advances for seed or for stock becomes less urgent. In such cases advances should be confined to landholders who are anxious to improve their land. Government considered that the sums of money which had been advanced to landholders to enable them to improve their carts was most judicious. Advances to improve irrigation were also always well spent. In the present state of the public resources it was impossible to sanction any considerable outlay, and endeavours must be confined to preventing the decay of works already in existence.' Considering his peculiar qualifications and intimate knowledge of the country, Government sanctioned the annual disbursement by Dr. Gibson the Superintendent of the botanical garden at Hivra of £300 (Rs. 3000) in advances to landholders desirous of undertaking works of irrigation. One form of advances which in the opinion of Government should be scrupulously restricted was the demand of advances with the object of forcing ordinary cultivation. Gov. Letter 1494 of 16th May 1842, Bom. Gov. Rev. Rec. 1344 of 1842, 275-278.]

Carts, 1840.

In 1836 the great loss which the people suffered from the want of a market for their grain impressed on the district officers the necessity of introducing measures to cheapen the cost of carriage Roads were being made, and the new road (1830) down the Bar pass made it possible to send produce to the Konkan and Bombay in carts. There were very few carts in the district. Those which were in use were for carrying great weights for short distance and had solid stone wheels. A new style of cart was introduced by Lieutenant Gaisford in 1836, and a cart factory was started by him at Tembhurni in Sholapur, [Bom, Gov, Sel. CVII. 39,40, 41, 54, 55. The people took great interest in the carts which were light weighing only 160 pounds, cheap costing about £4 (Rs. 40), and roomy enough to carry about three guarters of a ton. Many of the richer landholders bought carts. It was found that the bulk of the people were keen to buy but could not spare the money. Advances were made aggregating about £760 (Rs. 7600) and in the four years ending 1840 it was estimated that 3722 carts had been made and were in use. In his report for 1839-40 the Collector Mr. Stewart wrote (19th Nov. 1840): 'The improved description of carts is highly approved by all classes. The model has been generally adopted and several people make them for sale on speculation, in the city of

Poona.' To introduce cart-making into the leading country towns Mr. Stewart proposed that at each mamlatdar's station two workshops should be formed, which the children of the village carpenters and blacksmiths of the *pargana* should be allowed to attend to be taught cart-making. Where the means of learning their trade was thus within the reach of each carpenter and blacksmith of a village, Government might insist on a certain degree of skill to entitle him to the *inam* or perquisites attending his right to work for his village. As a further encouragement to the attainment of greater skill, a promise of employment under Government in the public works and ordnance might be held out to those who were considered fit for such situations. [Bom. Gov. Rev. Rec. 1241 of 1841, 20-21, 87-91.] Government did not favour Mr. Stewart's suggestions. In their opinion if cart-making paid, carmakers would soon spring up. [Bom. Gov. Rev. Rec. 1241 of 1841, 269-270.]

1841-42

The season 1841-42 was peculiarly unfavourable. The early rains fell in some sub-divisions so abundantly and incessantly as to destroy a large proportion of the early crops. The late harvest failed because the latter rains were too long of beginning. In some sub-divisions the standing crops were destroyed by locusts. The remissions amounted to 15.31 per cent. [Junnar 21.47, Indapur 10.96, Khed 14.72. Pabal 12.79, Purandhar 33.35, Bhimthadi 2.78, Haveli 7.77, Maval 7.21, and City of Poona 362. Bom. Gov, Rev. Rec. 1453 of 1843, 41-42.] At Indapur the rupee price of Indian millet or *jvari* rose from about 128 to 112 pounds (64-56 *shers*). The area under tillage [The details are:

Poona Tillage, 1838-1842.

| SUB-DIVISION. | 1838-39. 1839-40. 1840-41. | | 1841-42. | |
|---------------|----------------------------|---------|----------|---------|
| | Acres. | Acres. | Acres. | Acres. |
| Shivner | | | 143,763 | 144,762 |
| Indapur | ur 212,407 2 | | 224,695 | 227,564 |
| Pabal | | | 118,200 | 124,209 |
| Purandhar | | | 106,048 | 109,726 |
| Bhimthadi | 108,069 | 131,324 | 154,351 | 159,624 |
| Haveli | | | 60,467 | 80,142 |

| Khed | | 105,312 | 102,436 |
|------------|-------------|---------|---------|
| Maval | | 32,758 | 31,858 |
| Poona City | | 2246 | 2279 |
| Total | 895,438 | 947,840 | 982,600 |

Bom. Gov. Rev. Rec. 1344 of 1842, 32, and 1453 of 1843, 34,35,37. In 1842 there were 6148 acres of waste in Indapur and 43,705 in Bhimthadi. Rev. Rec. 1453 of 1843, 35. According to another statement there was in 1841-42 a decrease of 749 acres in tillage and of Rs. 226 in revenue in Indapur, and an increase of 5418 acres and Rs. 2368 in Bhimthadi. In Haveli and Pabal into which the survey settlement was introduced in 1841-42, there was an increase of 6382 acres in tillage and of Rs. 3438 in revenue in Haveli, and of 2068 acres and Rs. 1009 in Pabal. Bom. Gov. Rev. Rec. 17 of 1846, 63-66.]

in the whole district rose from 947,840 to 982,600 acres, and collections fell from £68,279 to £64,296 (Rs. 6,82,790-Rs. 6,42,960). [Of the decrease in revenue about £1800 (Rs. 18,000) were due to the introduction of survey rates into Pabal and Haveli. Bom. Gov. Rev. Rec. 1453 of 1843, 29.] Outstandings amounted to £2441 (Rs. 24,410). [The details are: Shivner Rs. 57, Indapur Rs. 3598, Khed Rs. 393, Pabal Rs. 3159, Purandhar Rs. 10,523, Bhimthadi Rs. 2934, Haveli Rs. 3237, Maval Rs. 2, and Poona City Rs. 505. Bom. Gov. Rev. Rec. 1453 of 1843, 125.] Since 1838 considerable progress had been made in clearing off the heavy balances which had for years been accumulating. The total of £69,016 (Rs. 6,90,160) in 1838 was reduced to £36,544 (Rs. 3,65,440) in 1841. [Mr. Vibart, Rev. Corm. 311 of 24th Feb. 1842.]

Indapur-Bhimthadi.

The low rates introduced into Indapur and Bhimthadi had led to a rapid spread of tillage. [The figures were, for Indapur 212,407 acres in 1838-39; 218,308 in 1839.-40; 224,695 in 1840-41; and 227,564 in 1841-42; and those for Bhimthadi 108,069 acres in 1838-39; 131,324 in 1839-40; 154,351 in 1840-41; and 159,624 in 1841-42. Bom. Gov. Rev. Rec. 1453 of 1843, 35. According to another statement there was in 1841-42 a decrease of 749 acres in tillage and of Rs. 226 in revenue in Indapur, and an increase of 5418 acres and Rs. 2368 in Bhimthadi. Bom. Gov. Rev. Rec. 17 of 1846, 63-66.] The tillage was superficial. As shown in the following statement the increase in the stock of cattle did not nearly keep up with the increase in the tillage area. The details

[Bom. Gov. Rev. Rec. 1344 of 1842, 135-136. The figures in this statement and in the statement in footnote 1 do not quite agree.] are:

Bhimthadi-Indapur Tillage and Working Cattle. 1840-1842.

| SUB-DIVISION. | LAST YEAR OF MR. PRINGLE'S SURVEY. | | 1840-41. | | 1841-42. | 1841. |
|-------------------------|--|--------|----------|--------|-----------------|--------|
| | Tillage. | Oxen. | Tillage. | Oxen. | Acres taken. | Oxen. |
| Bhimthadi. | Acres. | | Acres. | | Acres. | |
| Mamlatdar's Division | 49,576 | 9361 | 74,468 | 10,411 | 79,793 | 11,068 |
| Mahalkari's do. | 36,460 | 5349 | 78,127 | 7945 | 77,791 | 7864 |
| Indapur. | | | | | | |
| Mamlatdar's Division | 76,375 | 4905 | 118,164 | 7675 | 116,551 | 8958 |
| Mahalkari's do. | 64,012 | 4068 | 105,006 | 5776 | 103,593 | 8726 |
| Total | 226,423 | 23,683 | 375,765 | 30,807 | 377,728 | 36,616 |

In spite of the badness of the season the opening of cart tracks and the making of carts had caused a marked increase in traffic. [Bom. Gov. Rev. Rec, 1453 of 1843, 16.] In 1841 the chief exports were field produce, chiefly *jvari*, *bajri*, *tur*, gram, wheat, oil, and miscellaneous articles. Coarse cottons cloth chiefly for local use was woven in Indapur, Jejuri, Talegaon Dabhade, and some other villages. Returns prepared at Khandala on the Bombay-Poona road and on the other main lines of traffic showed an increase in the estimated value of the traffic from £110,528 (Rs. 11,05,280) in 1840-41 to £131,758 (Rs. 13,17,580) in 1841-42 or an increase of £21,230 (Rs. 2,12,300). The value of the articles on which import or *thal-mod* that is localemptying duties were levied in the city of Poona and in the town of Junnar, rose from £39,738 (Rs. 3,97,380) in 1840-41 to £41,623 (Rs. 4,16,230) in 1841-42, and the export or *thal-bharit* that is local-filling

goods were estimated to have fallen in value from £8880 (Rs. 88,800) to £6849 (Rs. 68,490). [Bom. Gov. Rev. Rec. 1453 of 1843,95-96.]

SURVEY.

Pabal, 1841-42.

In this year the thirty years' revenue survey settlement was introduced into the Pabal and Haveli sub-divisions. [Bom. Gov. Sel. CLI. 337.] Pabal was a narrow slip of land lying nearly north and south. It included a northern group with Ausari as its head-quarters which formed the mahalkari's charge and a southern group with Pabal as its head-quarters which formed the mamlatdar's charge. As all parts of the sub-division were about the same distance from the Sahyadris there was little variety of climate. In the north-west corner a few villages were hemmed in by considerable hills which caused a specially heavy rainfall while some villages on the eastern boundary received a scanty supply. The landholders though depressed were not so badly off as those of Indapur and Bhimthadi. The large proportion of hereditary or miras holders, 1850 out of 2442 in the Pabal group and 2719 out of 3262 in the Ausari group, showed that this sub-division had never suffered so severely as the east of the district. At the same time Pabal was depressed by over-assessment. Many of the villages were ruined and tillage had remained nearly stationary at 105,000 acres in the twelve years ending 1841 during which Mr. Pringle's settlement was nominally in force. [Bom. Gov. Sel. CLL. 339.] Daring those twelve years more than 50,000 acres or about a third of the Government arable land had lain waste. Of the total dry-crop or kamal jirayat assessment fixed in 1829 for the wholw Government arable land at £15,500 (Rs. 1,55,000) an average of only £7200 (Rs. 72,000) or less than one-half was realized. During the first nine years (1820-1829) of British rule the average rental including sayar or miscellaneous revenue was £13,783 (Rs. 1,37,830), and the average collections were £12,518 (Rs. 1,25,180). In the next twelve years (1829-1841) when the rent settlement was nominally made according to the assessment fixed at the 1829 survey, the average revenue for collection was £10,769 (Rs. 1,07,690) and the collections £8785 (Rs.87,850). The large average rental and collections during the first period (1820-1829) were due to the comparatively enormous revenue drawn from the land in the first few years of British rule. For the first three years (1820-23) the actual receipts on account of land revenue averaged upwards of £16,000 (Rs. 1,60,000) a year; in 1824 they fell to £10,800 (Rs.1,08,000); and in every succeeding year they were less than in 1824. Lieutenant Wingate thought that in the early years the

capabilities of the Deccan had been overtaxed and that this drain of capital was in great measure the cause of the future poverty and distress. [Lieutenant Wingate, 7th September 1841, Bom. Gov. Sel. CLI. 337-339, 348.] Of the two survey groups into which Pabal was divided the Pabal or mamlatdar's group in the south contained 113,054 acres distributed among twenty-eight villages. Measuring and classing were begun in 1839 and finished in 1840. The measurements of the 1829 survey, generally proved correct and were kept by the 1839 survey. Except a few villages in the east where the rainfall was somewhat scanty, the climate of the Pabal group was uniform. The people, though poor in house gear clothing and farm stock, were some shades better off than the people in the east. There were 188 shops. Still many of the villages and village walls were ruined, and manufactures did not flourish. Of 2442 landholders, 1850 were hereditary holders, 492 were casual holders, and 100 were ovandkaris or ovandekaris [It means the holder and cultivator of land which lies without the tract subject to the village in which he lives. I that is strangers. There were 1225 ploughs, 7521 bullocks, and 430 carts. Since the introduction of the 1829 survey the tillage area had varied little, the average of the three years ending 1841 showing an increase over the three years ending 1832 of about 4000 acres. [The various land measures in use, the pakka-bigha, kachcha-bigha, chahur, rukka, and khandi made it impossible to tell the area under tillage in the years before 1829. Bom. Gov. Sel. CLI. 329. This south or Pabal group did not come under British management until 1820. In that year the land revenue was £8332 (Rs. 83,320) and the other taxes yielded £418 (Rs.4180)or a total revenue of £8750 (Rs. 87,500). In 1828 the year before Mr. Pringle's survey, the land revenue was £4796 (Rs. 47,960) or nearly one-half what it was nine years before and the taxes £328 (Rs. 3280) or one-third less. The survey rates yielded a revenue of £5398 (Rs. 53,980) that is an increase of £600 (Rs.6000), but in the following year the rental sank to about its former level. Since 1835-36 it had been gradually diminishing at the rate of £100 (Rs.1000) a year and in 1838-39 was £5157 (Rs.51,570) or £3175 (Rs. 31,750) less than when the country came into the hands of the British, while the taxes were £190 or £230 (Rs. 1900 or Rs.2300) less. During the first nine years (1820-1829) remissions to the amount of £6764 (Rs.67,640) were given, and during the last ten years under the 1829 survey the sum of £7629 (Rs.76,290) was remitted, so that in the space of nineteen years the remissions amounted to the enormous sum of £14,393 (Rs. 1,43,930) that is nearly three years' rental. [Bom. Gov. Sel. CLI. 330. In the entire Pabal sub-division that is in both the Pabal and Ausari survey croups, taking land rent or ain jama and cesses or sayar together, the average yearly remissions during

1820-29 were Rs. 11,800 and outstandings Rs. 843, and during 1829-41 average remissions Rs. 17,141 and outstandings Rs. 2,699. Ditto, 338.] There was a large area of garden tillage. There were many water channels or *pats*, 739 wells of which 208 were out of repair, and 69 water-lifts or *budkis* of which 44 were out of repair. Lieutenant Robertson suggested that the rates sanctioned for the Pimpalgaon group of Bhimthadi which were thirty, three per cent higher than those of Indapur, [Bom. Gov. Sel. CLI. 310-311.] should be adopted for this Pabal group, as the two groups did not differ in climate, productiveness, nearness to Poona, or in means of sending produce to markets. The garden lands might he thought be assessed on the system adopted in Indapur.

The Ausari or northern group contained 74,662 acres distributed over thirty-four villages of which thirty-one were Government and three were dumala or reversionary. The measuring and classing were begun and finished in 1839-40. As the measurements of the 1829 survey proved incorrect in sixteen villages they were remeasured throughout. The error on the arable land of one village was found as high as 52 per cent, and in the other fifteen villages it varied from 17 to 30 per cent. The mistakes were almost entirely in favour of Government. In the remaining fifteen villages as the amount of error was within ten per cent the former measurement was retained. As it was nearer to the hills the Ausari group was better off for rain than the eastern Pabal villages. Consequently the difference in fertility between the better and the poorer soils was not so marked. The climate was much the same throughout, except in a few village's in the north-west which were surrounded by hills and in consequence had a specially large and certain supply of rain. The group was crossed by the Mina and the Ghod and nearly all of the villages were on the banks of these rivers. The soil of the tract drained by the Mina was poor, chiefly red or tambdi and stony or bardi, with few trees and much of it waste. The Ghod, from as far as Pimpalgaon, ran through better land, fairly wooded with mangoes and nearly all under tillage;. The chief dry grains were for the early harvest bajri and jvari and for the late or rabi harvest wheat, gram, and safflower or kardai. There were 806 wells and 64 water-lifts or budkis in good repair. The wells were chiefly used in growing vegetables wheat and gram, and in a few villages small patches of sugarcane plantain and mulberry trees. A dam across the Mina river at Narayangaon about ten miles south-east of Junnar, when in thorough repair, watered 362 acres of land. According to the 1829 survey the Ausari group contained 75,177 arable acres, of which in 1840, 55,970 acres were under tillage and 19,207 were waste; of 3262 landholders 2719 were hereditary holders, 426 casual holders,

and 117 strangers or ovandkaris. There were 1433 ploughs, 368 carts, and 9436 bullocks. [Capt. Landon, asst. sup, 25th August 1840, Bom. Gov. Sel. CLI. 333-334.] In fifteen villages there were good chavdis or village offices, in ten villages the village offices were sadly out of repair, and in seven villages they were in ruins. Besides serving as village offices, the chavdis were useful and convenient as a restingplace for native travellers. Ten villages had Marathi schools with a total attendance of 244 boys. At Narayangaon the master was paid by Government; in the other villages the pay of the master varied according to the number of boys and ranged from 6s. to 12s. (Rs. 3-6) a month, each boy paying 3d. to 6d. (2-4 as.) a month according to the progress he made. The boys were all very young as the parents did not like paying for them and soon took them away. The only manufactures were the weaving of coarse cotton cloth and of *kamblis* or blankets for local use. Several villages had a weekly market at which vegetables and small quantities of grain and coarse cloth were offered for sale. The amount of traffic was small. The surplus grain, tobacco, and other produce went either to Poona, Panvel, or Bhiwndi. Large droves of bullocks loaded with cotton from Amravati in Berar passed through Korti and Pabal on their way to Bombay. In 1820 when the Ausari villages came under British management the rental on the land under tillage was £8026 (Rs. 80,260). By 1828 it had fallen to £5653 (Rs. 56,530), and Mr. Pringle's survey in 1829 reduced it to £4662 (Rs. 46,620). Since 1829 the tillage area had varied little, but the amount of remissions and balances had been much larger since the 1829 survey than before. [Between 1820 and 1829 remissions and balances amounted to £4332 (Rs. 43,320) and between 1829 and 1839 they amounted to £9260 (Rs. 92,600). Bom. Gov. Sel. CLL 332.] At the time Ausari passed to the British (1820) the amount collected from the land was £8026 (Rs. 80,260) being the full assessment without any remission. The year before the survey (1828) it had fallen to £4487 (Rs. 44,870) and on the introduction of the survey in 1829 it fell to £3254 (Rs.32,540); in 1831 it fell to £2553 (Rs. 25,530); the following year it was more favourable, and in 1833 and the two following years nearly the whole assessment was collected; in 1836 it again fell to £3527 (Rs. 35,270), and since then it fluctuated between £3500 and £4000 (Rs.35,000 and Rs.40,000) which is less than half the amount collected when the British first took possession of the petty division in 1820. [Bom. Gov. Sel. CLI. 332]

Of the entire Pabal sub-division in a group of fifty-six villages the changes in revenue between 1836 and 1841, that is during the five years before the thirty years survey settlement, are as follows: [Bom. Gov. Sel. CLI. 309.]

Pabal Revenue, 1836-1841

| YEAR. | Villages. | Total Rental. | Unoccupied. | Occupied. | Remissions. | Collections. |
|-------------|-----------|------------------|-------------|-----------|-------------|--------------|
| | | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1836- 87 | 56 | 1,33,878 | 46,318 | 87,560 | 18,764 | 68,796 |
| 1837- 38 | 66 | 1,30,901 | 44,480 | 86,421 | 15,591 | 70,830 |
| 1838- 39 | 56 | 1,31,069 | 45,162 | 85,907 | 26,443 | 59,464 |
| 1839- 40 | 56 | 1,32,791 | 43,234 | 89,557 | 16,980 | 72,577 |
| 1840- 41 | 56 | 1,30,101 | 33,185 | 96,916 | 36,043 | 60,873 |

The survey rates proposed by the assistant superintendent Captain Landon [Captain Landon thought that the Pabal sub-division could easily bear an increase of 35 per cent on the rates fixed for Sholapur that is 68.3 per cent higher than those of Indapur, and 10 per cent additional on the inferior soils on account of their greater fertility. He also suggested that a few villages on the north-west might bear an additional 20 per cent on account of a more certain supply of rain, and a few on the eastern border be lowered 20 per cent on account of less certain rainfall, Bom, Gov. Sel, CLI, 311.] gave for the whole subdivision an acre average of 1s. 1½d. (9 as.) and a maximum dry-crop assessment on the arable land, of 4 Captain Landon thought that the Pabal sub-division could easily bear an increase of 35 per cent on the rates fixed for Sholapur that is 68.3 per cent higher than those of Indapur, and 10 per cent additional on the inferior soils on account of their greater fertility. He also suggested that a few villages on the north-west might bear an additional 20 per cent on account of a more certain supply of rain, and a few on the eastern border be lowered 20 per cent on account of less certain rainfall. Bom. Gov. Sel. CLI. 311. £9281 (Rs. 92,810). This in addition to the garden or bagayat rental of £1550 (Rs. 15,500) gave a total survey rental of £10,831 (Rs. 1,08,310). Compared with the average collections of *the* previous ten years this total rental showed an increase of £2631 (Rs. 26,310). The immediate sacrifice on the part of Government was estimated at £52 (Rs. 520). For garden land, of which a considerable area was watered

from channels, the assistant superinten dent recommended an acre rate of 6s. (Rs.3). There was also a small area of the rich alluvial soil called dheli. Some of this land which had been put to auction in the previous year was rented at 16s. (Rs. 8) the acre. As the area of this alluvial land depended on the river, the assistant superintendent recommended that the existing system of disposing of it by yearly sale should be continued As the garden land at Narayangaon was watered from a dam across the Mina river which cost Government a large sum to keep in repair, [Rebuilding about one-third of the dam cost about Rs. 37,000. Captain Landon, 25th August 1840, Bom. Gov. Sel. CLI. 335. In 1838 the Revenue Commissioner reduced the rates from Rs. 17, Rs. 12½, Rs. 6, and Rs.3 to Rs. 14, Rs. 9, Rs. 4 and Rs.3. Bom. Gov Sel. CLI. 336. and, as the rates had been revised by the Revenue Com-missioner in 1838, the assistant superintendent advised that the present rates should be continued with an acre reduction of 2s. (Re. 1) in the first class and 1s. (8 as.) in the other classes. The rates he proposed were £1 6s., 17s., 7s., and 5s. (Rs. 13, Rs. 8 ½, Rs. 3½, and Rs. 2½). Lieutenant Wingate thought the proposed dry-crop rates too high. If the whole arable area was brought under tillage they would cause an increase of 38 per cent. To place the two Pabal groups on the same favourable position as the Indapur and Bhimthadi groups he would reduce the proposed rates by ten per cent. The watered lands amounted to about 6000 acres of which 3900 were watered from wells, 950 from channels, and 1150 from wells and channels. Wellwatered or motasthal lands were not subjected to any extra taxation before the 1840 survey. Lieutenant Wingate recommended that wellwatered land should be assessed on the plan adopted for the eastern sub-divisions. For channel watered land an acre rate of 6s. (Rs.3) to 2s. (Re.1) in excess of highest dry-crop rate was proposed. Land watered from both channels and wells was to be assessed by a combination of the two rates. The settlement as modified by Lieutenant Wingate would, when the whole arable land was brought under tillage, represent an increase of £2000 (Rs. 20,000) or twentysix per cent on the average collections of £7700 (Rs. 77,000) during the twelve; years ending 1841. According to Lt. Wingate's rates the dry-crop rentalamounted to £8350(Rs. 83,500) and the garden rental to £1350 (Rs. 13,500) or a total of £9700 (Rs. 97,000). Bom. Gov. Sol. CLI. 342. Lieutenant Wingate's rates were approved and sanctioned. [Gov. Letter 3679 of 3rd Dec. 1841. Bom. Gov. Sel. CLI. 348-349. At the survey settlement a *miras patti* or hereditary holders' cess yielding about £30 (Rs. 300) levied every third year from a few villages was abolished. Another cess of the same name and yielding nearly £200 (Rs. 2000) had been levied every third year from the members of the village staff or balutedars. This was changed into a

yearly cess of one-third of the former amount. Bom. Gov. Sel. CLI. 341.]

Haveli 1841-42.

The survey settlement was introduced into the Haveli subdivision in 1841. [Bom. Gov. Sel. CLI. 428.] As Haveli lay to the west of Bhimthadi it enjoyed a larger share of the south-west rains. *Bajri* was the staple grain and varied in good soils with early *jvari* and with late wheat and gram. Near the hills a few patches of rice were grown. Near Poona the grazing land was very valuable. In one village upwards of 100 fields were kept in grass. In the villages round Poona, except in the lands of the rich where it was used as manure, the cowdung was stored and carried as fuel to the city. In the city there was a constant demand for grass, vegetables, and fruit, and the average price of grain was twenty to twenty-five per cent higher than in Bhimthadi. According to the 1829 survey, exclusive of *inams* the Haveli subdivision contained 96,383 acres of arable land assessed by Mr. Pringle at£111,920 (Rs. 1,19,200). The following statement shows the rental and collections for the twenty-two years ending 1840: [Bom, Gov. Sel. CLI. 429.1

Haveli Revenue, 1818-1840.

| VEAD | Rer | ntal. | Ctivor | Total | Domissions | Palancos | Colloctions | |
|---------------|--------|---------|---------|----------|-------------|-----------|--------------|--|
| YEAR. | Land. | Cesses. | Stiyar. | Total. | Kemissions. | Balances. | Collections. | |
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | |
| 1818- 1840 | 79,042 | 27,765 | 7681 | 1,14,488 | 19,034 | 4271 | 91,183 | |
| 1818- 1830 | 80,634 | 33,672 | 8379 | 1,22,682 | 21,444 | 2784 | 98,454 | |
| 1830- 1840 | 77,136 | 20,676 | 6842 | 1,04,654 | 16,139 | 5478 | 83,037 | |

In a group of eighty-one villages the collections during the five years ending 1840-41 averaged £6445 (Rs. 64,450). [Bom. Gov. Sel. CLI. 409.] The details are:

Haveli Revenue, 1836-1841.

| YEAR. | Villages. | Total Rental. | Unoccupied Land. | Occupied land. | Remissions. | Collections. |
|-------------|-----------|------------------|---------------------|----------------|-------------|--------------|
| | | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1836- 37 | 81 | 1,35,066 | 44,948 | 90,118 | 19,089 | 71,029 |
| 1837- 38 | 81 | 1,26,993 | 38,017 | 88,976 | 26,567 | 62,409 |
| 1838- 39 | 81 | 1,25,563 | 36,060 | 89,503 | 35,097 | 54,406 |
| 1839- 40 | 81 | 1,26,447 | 35,904 | 90,543 | 27,677 | 62,866 |
| 1840- 41 | 81 | 1,26,102 | 36,268 | 89,834 | 18,281 | 71,553 |

Of 119,720 acres assessed at £15,255 (Rs. 1,52,550), 23,337 acres were alienated. Had the whole of the remaining 96,383 acres assessed at £11,920. (Rs. 1,19,200) been cultivated during the previous twenty-two. years, the land assessment alone for that period would have amounted to £262,240 (Rs. 26,22,400). The sum of £2000 (Rs. 20,000) a year or £44,000 (Rs. 4,40,000) for the whole period under cess revenue, raises the total to £306,240 (Rs. 30,62,400). Of these £300,000 (Rs. 30 lakhs), only about £200,000 (Rs. 20 lakhs) were realized between 1818 and 1840. Of the remaining £100,000 (Rs. 10 lakhs) Lieutenant Wingate assigned £48,500 (Rs. 4,85,000) to loss on account of remissions, £9300 (Rs. 93,000) to outstanding balances, and the rest to the want of tillage. On comparing the twelve years before and the ten years after the 1830 survey it appears that remissions and balances slightly increased and the revenue considerably diminished. In the first twelve years the average jamabandi was £12,500 (Rs. 1,25,000); in the last ten years it was only £10, 776 (Rs. 1,07,760). The collections had fallen considerably. In the first twelve years the Government receipts. averaged £7400 (Rs. 74,000) a year; in the last ten they averaged only £5800 (Rs.58,000) [Bom. Gov. Sel. CLI. 435-436. These averages differ from those given in the statement on page 431. According to Lieutenant Nash the improvement since 1883 was due to the grant of rising leases or istava kauls. In spite of these concessions, in 1841 Haveli was suffering from a high nominal assessment with constant remissions and balances. In fifty villages visited by Lieutenant Nash

(1841) he found a want of energy and enterprise and slovenly cultivation; still there were no large tracts of waste black soil nor any ruinous villages. In fact almost all the good soil was under tillage. Close to Poona, land was eagerly sought for, and the villages had a greater air of comfort than elsewhere. Haveli had never suffered so severely from war or famine as the eastern tracts. The country had never been emptied of its people. There were more hereditary holders; the people were more attached to their villages, less ready to change their homes, and more fitted to cope with loss. [Bom. Gov. Sel. CLI. 436-437.]

The acre rates proposed by Lieutenant Nash were in black land 2s. 9d., 2s. 3d, 1s. 9d, and 1s. 3d (Rs. 1%, Rs. 1% 14 as., and 10 as.); in red land 2s. $4\frac{1}{2}d$, 1s. $10\frac{1}{2}d$, 1s. $4\frac{1}{2}d$, and $10\frac{1}{2}d$. (Rs. $1^{3}/16$, 15 as., 11 as., and 7 as.); and in brown or $barad\ laad\ 1s.\ 2^{2}/5d$, $8^{2}/5d$ and $3^{3}/5d$ (9 $as.\ 7^{1}/5ps.$, 5 $as.\ 7^{1}/5$ ps., and 2 $as.\ 4^{4}/5$ ps.). [The details are:

Poona Survey Acre Rates, 1837 -1841.

| CLASS | Indanun | | nthadi. | امردان | CLASS | Indapur | | nthadi. | Haveli. |
|--------|---------|------|-------------|---------|------------|---------|------|-------------|---------|
| CLASS. | Indapur | | Pimpalgaon. | naveii. | CLASS. | • | | Pimpalgaon. | пачен. |
| Black. | Res. | Res. | Res. | Res. | Red—contd. | Res. | Res. | Res. | Res. |
| I. | 300 | 330 | 375 | 550 | III. | 90 | 100 | 130 | 275 |
| II. | 240 | 265 | 300 | 450 | IV. | | | | 175 |
| III. | 170 | 185 | 233 | 350 | Brown. | | | | |
| IV. | | | | 250 | DI UWII. | | | | |
| Red. | | | | | I. | 130 | 100 | 165 | 240 |
| Keu. | | | | | II. | 60 | 65 | 100 | 140 |
| I. | 200 | 220 | 260 | 475 | III. | 35 | 40 | 60 | 60 |
| II. | 130 | 145 | 180 | 375 | IV. | | | | |

Bom, Gov. Sel. CLI. 440. One rupee or two shillings are equal to 400 ret. Gov. Letter 3682 of 3rd December 1841, Bom. Gov. Sel. CLI. 449-451.]

These rates were calculated to give; an average acre rate of 1s. 6d. (12 as.) against the Bhimthadi average of 1s. (8 as.). An extra assessment not exceeding 6s. (Rs. 3) the acre was proposed for the small area of rice land. On garden lands in addition to the highest drycrop rate, acre rates varying from 2s. (Re. 1) to 6s. (Rs. 3) were proposed. These proposals were sanctioned by Government in December 1841.

1842-43,

Except in Purandhar where the rainfall was short and the crops were injured by insects and caterpillars, the season of 1842 was on the whole very favourable. Remissions fell from 15.27 per cent to 334 per cent. Of £2694 (Rs. 26,940) the whole amount remitted, £1426 (Rs. 14,260) were granted in Purandhar. At Indapur the rupee price of Indian millet or *jvari* fell from about 112 to 136 pounds (56-68 *shers*). Over the whole district the tillage area rose from 982,600 to 1,000,881 acres and the collections from £64,296 to £76,958 (Rs. 6,42,960 - Rs. 7,69,580); £964 (Rs. 9640) were left outstanding. [Bom. Gov. Rev. Rec. 1453 of 1843, 34, 37, 124-125, and Rec. 1568 of 1844, 56-57, 76, 168-169. The details are:

Poona Tillage and Revenue, 1841-1843.

| | | | 1841-42 | 2. | | 1842-43. | | | | |
|-------------------|----------------|----------|------------------|-------------------------|-------------------|----------------|----------|------------------|-------------------------|-------------------|
| SUB- DIVISION. | Vill- ages. | Tillage. | Remiss- ions. | Out- Stand- ings. | Collec- tions. | Vil- lages. | Tillage. | Remiss- ions. | Out- stand- ings. | Collect- ions. |
| | | Acres. | Rs. | Rs. | Rs. | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 144,762 | 34,188 | 57 | 1,28,192 | 176 | 150,398 | 4566 | 475 | 162,543 |
| Indapur | 771/2 | 227,564 | 8739 | 3598 | 67,374 | 80 | 228,551 | | 60 | 81,112 |
| Khed | 182 | 102,436 | 15,332 | 393 | 88,452 | 182 | 99,288 | 2300 | 205 | 1,02,487 |
| Pabal | 56 | 124,209 | 12,917 | 3159 | 85,692 | 56 | 134,977 | 3379 | 4361 | 91,803 |
| Purandhar | 691/2 | 109,726 | 35,916 | 10,523 | 61,254 | 691/2 | 111,704 | 14,260 | 1074 | 99,069 |
| Bhimthadi | 69 | 159,624 | 2170 | 2934 | 72,877 | 69 | 152,824 | | 718 | 81,903 |
| Haveli | 82 | 80,142 | 6534 | 3237 | 74,285 | 83 | 88,173 | 1767 | 2555 | 80,811 |

| Maval | 175 | 31,858 | 4219 | 2 | 55,870 | 175 | 32,746 | 465 | 155 | 60,344 |
|-------------------|-----|---------|----------|--------|----------|--------|-----------|--------|------|----------|
| Poona City | 2 | 2279 | 299 | 505 | 7435 | 2 | 2220 | 200 | 32 | 7818 |
| Sheep- grazing | I | | - | | 1530 | | | | I | 1690 |
| Total | 889 | 982,600 | 1,20,314 | 24,408 | 6,42,961 | 8921/2 | 1,000,881 | 26,937 | 9635 | 7,69,580 |

According to another statement, in 1842 43 of the four revised subdivisions Indapur showed a decrease in tillage of 6601 acres and in revenue of Rs. 2599; Bhimthadi showed a decrease in tillage of 6619 acres and in revenue of Rs. 3380; Pabal showed a decrease in tillage of 8506 acres and in revenue of Rs. 1216; Haveli showed an increase in tillage of 3193 acres and in revenue of Rs. 1214. Bom. Gov. Rev. Rec. 17 of 1846, 63-66.]

The prosperous character of the season of 1842-43 was shown by a marked increase in the town duties of the city of Poona and Junnar, the amounts being £6051 (Rs. 60,510) in 1841-42 and £6699 (Rs. 66,990) in 1842-43. [Bom. Gov. Rev. Rec. 1568 of 1844, 100.] Compared with 1841-42 the returns for 1842-43 showed an increase in the estimated number apparently of bullock-loads that passed through the district from 376,171 to 619,257. [The details are:

Poona Transit Trade, 1841-1843.

| DIVISION. | 1841-42. | 1842-43. | Increase. | DIVISION. | 1841-42. | 1842-43. | Increase. |
|-----------|----------|----------|-----------|----------------|----------|----------|-----------|
| | Ras. | Ras. | Ras. | | Ras. | Ras. | Ras. |
| Shivner | 31,439 | 33,935 | 2496 | Indapur | 28,965 | 28,213 | 752 |
| Pabal | 40,982 | 62,201 | 21,219 | Poona City. | 37,559 | 36,876 | 683 |
| Purandhar | 51,374 | 94,330 | 42,956 | Total | | | |
| Bhimthadi | 185,852 | 363,702 | 177,850 | Total | 376,171 | 619,257 | 243,086 |

Bom. Gov. Rev. Rec. 1568 of 1844, 113-114.

Ras means head of cattle, total. It is not clear from the original reports what these figures represent. The Collector of Poona (4767 of 19th June 1884) thinks they denote the number of bullock-loads.

The returns also showed an increase in exports from 42,433 to 64,599 bullock-loads and in imports from 392,603 to 429,801. [The details are:

Poona Exports and Imports, 1841-1843.

| SUB- | | EXPORTS. | | | IMPORTS. | |
|---------------|----------|----------|-------------|----------|----------|------------|
| DIVISION. | 1841-42. | 1842-43. | Increase. | 1841-42. | 1842-43. | Increase |
| | Ras. | Ras. | Ras. | Ras. | Ras. | Ras. |
| Shivner | 20,613 | 21,526 | 913 | 15,587 | 23,837 | 8250 |
| Indapur | 8683 | 25,460 | 16,777 | 16,890 | 16,881 | - 9 |
| Pabal | 2289 | 2985 | 696 | 4269 | 5890 | 1621 |
| Bhimthadi | 3310 | 5928 | 2618 | 4312 | 4763 | 451 |
| Poona City | 7538 | 8700 | 1162 | 338,178 | 364,669 | 26,491 |
| Purandhar | | | -426 | 13,367 | 13,261 | -106 |
| Total | 42,433 | 64,599 | 21,740 | 392,603 | 429,301 | 36,698 |

Bom. Gov. Rev. Rec. 1568 of 1844, 112-113. See note 3 on page 433.

The Maval imports showed an increase of 1847 bullock-loads and the exports a decrease of 621, and the transit trade a decrease of 2200 bullock-loads. This carrying trade was from and to the coast through the Nane Maval by the Bor pass. The exports were cotton, grain, vegetable oils, native cloth, tobacco betel leaves, hides, and potatoes; the imports comprised salt, European cloths, and groceries. [Bom. Gov. Rev. Rec. 1568 of 1844, 134-135. The decrease in the transit trade was due to the opening of the Kusur pass where the traffic had risen by 26,826 bullock-loads. In Khed imports showed an increase of 2920 bullock-loads, exports a fall of 523, and the transit trade a fall of 135,121 bullock-loads. The decrease in the transit trade was chiefly on the Indrayani and Navlakh-Umbra roads. The made road that passed through the Khed sub-division showed an increase of 1843 bullockloads. [Bom. Gov. Rev. Rec. 1568 of 1844, 111, 112, 135.] In 1843 in Maval and Khed where roads had been made, a good type of cart was fast taking the place of pack bullocks. [Mr. Inveracity, first assistant

collector, 12th October 1843, Bom. Gov. Rev. Rec. 1568 of 1844, 114, 136.] In December 1843 Mr. Stewart the Collector dwelt on the great advantage to trade which would result from carrying on the Bombay-Poona made road to Sholapur. Local inquiry had satisfied him that the outlay would be met from tolls. [Mr. Stewart, Collector, 1881 of 28th December 1843, Bom. Gov. Rev. Rec. 1568 of 1844, 115; Mr. Inverarity, October 1843, Ditto 134-135.]

In 1839 an inquiry was begun into the outstanding balances some of which had remained without examination since 1819. The inquiry lasted till 1843 when it was almost completed and large sums were realized. In December 1843 the Collector Mr. Stewart described the district as prosperous. Large amounts of Outstandings had been recovered, the Government revenue was punctually paid tillage was spreading, the people were gradually becoming more prosperous, and improvements were keeping pace with the increase of capital expended either by Government or private individuals [Mr, Stewart, Collector, 28th Dec. 1843, Rev. Rec. 1568 of 1844, 119-120.] Advances were continued in this year chiefly with the object of building or repairing village offices and of improving the water supply. The details were: 26 wells made, 18 wells repaired, 4 water-lifts made, and one cistern made; 23 village offices built and 12 repaired. Besides these the people had at their own expense sank seventeen wells, and repaired three, and made three water-lifts. Mr. Stewart, Collector, 28th Dec. 1843, Bom. Gov. Rev, Rec 1568 of 1844, 74-75.]

Indapur,

1845.

To any one who knew the place a few years before, in 1843 the increased population and improved market of Indapur were notable, and the number and increased comfort of the villagers were equally striking. Most of the people considered the change the result of the 1836 survey. [Mr. Price, assistant surrey superintendent, Karmala Survey Report, 18th July 1843, Bom. Gov. Sel. CL. 465.]

1843-44.

In 1843-44 the rainfall was sufficient. It was untimely in the west where the early crops on low-lying land suffered greatly, and the late harvest was injured by a failure of the latter November rain; £4292 (Rs. 42,920) or 5.42 per cent were remitted. [The details were: Shivner 13.77 per cent, Indapur 0.21, Khed 5.13, Pabal 0.51,

Purandhar (Sasvad division) 22.12 and (Supa division) 120, Bhimthadi 0.06, Haveli revised villages 0.0013 and unrevised villages 5.62, Maval 1.01, and Poona City 2.13. Bom. Gov. Rev. Rec. 17 of 18.48, 50.52.] At Indapur the rupee price of Indian millet or *jvari* fell from about 136 to 144 pounds (68-72 *shers*). Over the whole district the tillage area rose from 1,000,881 to 1,055,282 acres and the collections fell from £76,958 (Rs. 7,69,580) to £74,442 (Rs. 7,44,420); £450 (Rs. 4500) were left outstanding. [Bom. Gov. Rev. Rec. 1568 of 1844, 56,57, 76,168-169, and Rec. 17 of 1846,116-118,180-181. The details are:

Poona Tillage and Revenue, 1842-1844.

| | | 18 | 842-43 | | | | 1 | 843-44 | | |
|-------------------|----------------|-----------|------------------|-------------------------|-------------------|----------------|-----------|------------------|------------------------|-------------------|
| SUB- DIVISION. | Villag- eas | Tillage. | Remi- ssions. | Out- stand- ings. | Collec- tions. | Vill- ages. | Tillage. | Remis- sions. | Out stand- ings. | Collec- tions. |
| | | Acres. | Rs. | Rs. | Rs. | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 150,398 | 4566 | 475 | 162,543 | 176 | 150,326 | 23,089 | 235 | 1,44,311 |
| Indapur | 80 | 228,551 | | 60 | 81,112 | 80 | 222,516 | 161 | 277 | 78,711 |
| Khed | 182 | 99,288 | 2300 | 205 | 102,487 | 184 | 104,063 | 5371 | 194 | 99,068 |
| Pabal | 56 | 134,977 | 3379 | 4361 | 91,803 | 57 | 147,984 | 511 | 559 | 98,915 |
| Purandhar | 69½ | 111,704 | 14,260 | 1074 | 99,069 | 691/2 | 147,983 | 12,012 | 885 | 86,763 |
| Bhimthadi | 69 | 152,824 | | 718 | 81,903 | 69 | 150,366 | 48 | 177 | 81,753 |
| Haveli | 83 | 88,173 | 1767 | 2555 | 80,811 | 83 | 97,116 | 930 | 2047 | 85,289 |
| Maval | 175 | 32,746 | 465 | 155 | 60,344 | 180 | 32,709 | 620 | | 60,365 |
| Poona City | 2 | 2220 | 200 | 32 | 7818 | 2 | 2220 | 175 | 38 | 7966 |
| Grazing | | | | | 1690 | | | | 86 | 1331 |
| Total | 8921/2 | 1,000,881 | 26,937 | 9635 | 7,69,580 | 900½ | 1,055,282 | 42,917 | 4498 | 7,44,422 |

According to another statement, in 1843-44, of the four revised subdivisions Indapur showed a decrease of 5468 acres in tillage and of Rs. 2317 in revenue; Bhimthadi showed a decrease of 2458 acres in tillage and of Rs. 1419 in revenue; Haveli showed an increase of 3098 acres in tillage and of Rs. 1402 in revenue; Pabal showed an increase of

5731 acres in tillage and a decrease of Rs. 280 in revenue. Bom, Gov. Rev, Rec, 17 of 1846,63-66,]

In 1843-44 there was a further increase in the transit trade. There were no local manufactures fit for export. The common grains were the chief exports to the coast; the chief return traffic was in European goods and salt. Mr. Inverarity the Collector, writing on the 31st of December 1844, repeated Mr. Stewart's views on the advantage of opening a made road between Poona and Sholapur. Along this line came all the exports from the east and south-east. The trade was hampered by the Bapdev pass which was impracticable for heavy ordnance or for laden carts. How highly the people valued carts was shown by the fact that with the help of Government and by the aid of local contribution the people of the market town of Ghode in Khed had made roads with side-drains through their town where before no cart could pass. [Mr. Inverarity, 31st Deo. 1844. Bom. Gov. Rev. Rec. 17 of 1846, 107 -110. Of late years the north of the district had greatly benefited by the introduction of potato growing. In 1844 a large part of the Bombay market was supplied from Junnar. The culture of the Mauritius sugarcane had also increased from 388 to 547½ acres. Mr. Inverarity, 31st Dec. 1844, Bom. Gov. Rev. Rec. 17 of 1846,72.] In spite of the spread of tillage in Indapur and Bhimthadi the people were still poor. About one-third of the wells had been allowed to fall into disrepair. [Mr. Inverarity, Bom. Gov. Rev. Rec. 17 of 1846,79-80.] Though 1842-43 and 1843-44 were favourable years and the advance under the generally improved conditions continued in other parts of the district, there was a decline in Indapur and Bhimthadi. This was believed to be due to the fact that the low rates of Mr. Goldsmid's settlement had unduly stimulated tillage and that the increased supply had affected prices and the lands ceased to pay the cost of tillage. [Mr. Invergrity, Bom. Gov. Rev. Rec. 17 of 1846, 63-64. On the 31st of December 1844 Mr. Inverarity noticed that the decline in the tillage area in Indapur and Bhimthadi was necessary. He thought it was due to the fall in the price of grain in those sub-divisions. Tillage might be expected to go on decreasing until the more needy landholders sank to be labourers and the eventual contraction of produce enabled the substantial farmer to command better prices. [Bom. Gov. Rev. Rec. 17] of 1846, 65.] In Supa also there was a decline. The survey measurement had made a nominal addition to the extent of lands under cultivation in the Supa group of villages. In reality there had been a decrease to the extent of 5619 acres assessed at £370 (Rs. 3700), [68 were brought under the Acres 10,387 were thrown out of cultivation and 47 plough; the net decrease was 5619 acres. Bom. Gov. Rev. Rec. 17 of 1846, 66. The decline which had taken place in

Indapur and Bhimthadi did not extend to Haveli and Pabal. The reason was that Poona was a certain market and that there were more means of raising watered crops. [Bom. Gov. Rev. Rec. 17 of 1846,66 - 67.] Under Act XIX of 1844 all taxes on trades and occupations were repealed. [Bom. Gov. Rev. Rec. 23 of 1849,167.] Of this sweeping and ill-considered measure the Collector Mr. Courtney complained with justice that it pressed hardly on the rural people. The people of towns were now relieved from almost all taxation and ceased to contribute their share to the revenues of the state. [Mr. Courtney, Collector, 21st Dec 1847, Bom. Gov. Rev. Rec. 23 of 1849, 167.]

SURVEY.

Supa, 1843-44.

In 1843-44 the thirty years' revenue survey settlement was introduced into the Supa petty division of Purandhar. [Bom. Gov. Sel. CLI. 521-545.1 Of the 39½ Supa villages twenty-five were remeasured, twelve were tested, and the rest which had lately lapsed to Government were measured for the first time. Supa was bounded on the north by Bhimthadi, on the east by Indapur, on the south by the Nira river, and on the west by the Sasvad division of Purandhar. The country along the Karha and Nira was flat and seamed with stream beds. The northern and two or three of the western and central villages were hilly. In common with Indapur and still more with the Kurkumb group in east Bhimthadi, Supa suffered from uncertain rain. [According to a local tradition the want of rain in the country between Jejuri and Baramati was due to a curse. Lieut E. Evans, assistant superintendent of survey, 33 of 8th July 1843, Bom. Gov. Sel. CLI. 530.] The only road for loaded carts from Supa to Poona was by Khed. The chief markets were Sasvad, Wai, Bhor, and Satara. The *jvari* was inferior to that grown towards Madha and did not meet with a ready sale at Satara, but was sold at a profit at Way, Bhor, and Sasvad from which it went to Mahad in the Konkan. Bajri found a ready market. There were few carts in Supa except carts with solid stone wheels. The first survey settlement introduced in this group was by Mr. Pringle in 1829-30. About 1835, when these villages were in a state of depression, Captain Shortrede reduced Mr. Pringle's rental from £12,270 to £8898 (Rs. 1,22,700-Rs. 88,980) or 27.5 per cent. But owing to the defective manner in which the revision was effected, the levy of Captain Shortrede's modified assessment was found to be impracticable and concessions had to be made under the form of short rates or ukti and of leases or kauls. [Bom. Gov. Sel. CLI. 513,,524-525.] The following statement [Bom. Gov. Sel. CLI. 540-541. From this statement it

appears that during the six years. (1829 -1835) of Mr. Pringle's settlement the average collections amounted to Rs.29,230, and during the seven years of Lieut, Shortrede's settlement (1835-1842) they amounted to Rs. 28,269.] shows the remissions and land revenue collections in the Supa group of villages during the twenty-three years ending 1841-42:

Supa Revenue, 1819-1842.

| YEAR. | Remis- ssion. | Collect- ions. | YEAR. | Remis- sions. | Collections. | YEAR. | Remis- sions. | Collections. |
|-------------|------------------|-------------------|-------------|------------------|--------------|-------------|------------------|--------------|
| | Rs. | Rs. | | Rs. | Rs. | | Rs. | Rs. |
| 1819- 20 | | 43,519 | 1828- 29 | | 27,223 | 1837- 38 | 1969 | 33,428 |
| 1820- 21 | | 47,352 | 1829- 30 | | 47,547 | 1838- 39 | 8245 | 30,292 |
| 1821- 22 | 30 | 52,186 | 1830- 31 | 28,323 | 5680 | 1839- 40 | 7868 | 37,385 |
| 1822- 23 | | 56,338 | 1831- 32 | 11,494 | 29,054 | 1840- 41 | 29,292 | 22,982 |
| 1823- 24 | 554 | 7826 | 1832- 33 | 32,867 | 6348 | 1841- | 22 004 | 25.020 |
| 1824- 25 | 158 | 7478 | 1833- 34 | | 47,734 | 42 | 22,884 | 25,038 |
| 1825- 26 | | 27,348 | 1834- 35 | | 39,017 | | | |
| 1826- 27 | | 28,399 | 1835- 36 | 8 | 20,163 | 1835- 42 | 10,632 | 28,269 |
| 1827- 28 | | 10,351 | 1836- 37 | 4159 | 28,592 | | | |

During this period at Supa the rupee price of millet fell from about 38 to 128 pounds (19-64 *shers*) for *jvari* and from about 86 to 80 pounds (18-40 *shers*) for *bajri*. [Bom. Gov. Sel. CLL. 539. The details are:

Indapur - Patas- Supa Grain Rupee Prices, 1818 - 1843.

| VEAD | INDA | PUR. | PAT | AS. | SUI | PA. |
|---------|--------|--------|--------|--------|--------|--------|
| YEAR. | Jvari. | Bajri. | Jvari. | Bajri. | Jvari. | Bajri. |
| | Shers. | Shers. | Shers. | Shers. | Shers. | Shers. |
| 1818-19 | 11 | 61/2 | 17 | 12 | 19 | 18 |
| 1819-20 | 15 | 17 | 181/2 | 22 | 19 | 11 |
| 1820-21 | 31 | 27 | 22 | 26 | 22 | 20 |
| 1821-22 | 50 | 38 | 52 | 64 | 44 | 20 |
| 1822-23 | 60 | 28 | 112 | 28 | 76 | 46 |
| 1823-24 | 27 | 29 | 26 | 121/2 | 24 | 40 |
| 1824-25 | 131/2 | 15½ | 12 | 17 | 14 | 12 |
| 1825-26 | 35 | 201/2 | 33 | 36 | 37 | 16 |
| 1826-27 | 52 | 52 | 46 | 33 | 46 | 35 |
| 1827-28 | 52 | 42 | 29 | 34 | 27 | 32 |
| 1828-29 | 60 | 53 | 66 | 44 | 56 | 31 |
| 1829-30 | 44 | 32 | 40 | 38 | 32 | 381⁄2 |
| 1830-31 | 40 | 39 | 40 | 33 | 38 | 461/2 |
| 1831-32 | 60 | 36 | 52 | 32 | 42 | 35 |
| 1832-33 | 20 | 34 | 22 | 24 | 35 | 31 |
| 1833-34 | 40 | 22 | 44 | 52 | 401/2 | 20 |
| 1834-35 | 60 | 28 | 50 | 40 | 46 | 31½ |
| 1835-36 | 36 | 32 | 34 | 34 | 37 | 46 |
| 1836-37 | 50 | 32 | 44 | 44 | 50 | 35 |
| 1837-38 | 64 | 42 | 56 | 32 | 50 | 31 |
| 1838-39 | 38 | 40 | 34 | 34 | 32 | 44 |
| 1839-40 | 56 | 36 | 48 | 38 | 44 | 31 |
| 1840-41 | 52 | 32 | 48 | 38 | 46 | 34 |
| 1841-42 | 60 | 46 | 56 | 36 | 46 | 35 |
| 1842-43 | 80 | 48 | 64 | 46 | 64 | 40 |

| Total | 1096½ | 8271/2 | 10651/2 | 8491/2 | 9861/2 | 7791/2 |
|-----------------------|---------|--------|----------------------|----------------------|----------------------|---------------------|
| Add | 137¹/16 | 1033/8 | 49 ¹⁵ /16 | 39 ¹³ /16 | 92 ¹⁵ /32 | 76 ¹ /26 |
| Poona <i>Shers</i> | 1234 | 931 | 1115 | 889 | 1079 | 856 |
| Yearly average | 49 | 87 | 45 | 36 | 48 | 34 |

1

Under the new survey for the Supa group the Kurkumb dry-crop rates which were ten per cent higher than those introduced into Indapur were proposed. The total new dry-crop-rental amounted to £5820 (Rs. 58,200) of which the land (111,768 acres) under cultivation yielded £4700 (Rs. 47,000) or an increase of 84 per cent. For garden lands the sum of 4s. (Rs. 2) the acre in excess of dry-crop rates was fixed. The new rental of garden lands amounted to £800 (Rs. 3000). [Bom. Gov. Sel. CLI. 513, 521-545.]

1844-45

In 1844-45 near the Sahyadris the rainfall was enough for the early crops, in the east the late crops generally failed, and scarcity of fodder caused such distress that most of the labouring cattle had to leave the district. At Indapur the rupee price of Indian millet *or jvari* rose from about 144 to 120 pounds (72-60 *shers*). The tillage area in the whole district rose from 1,055,282 to 1,063,127 acres and the collections fell from £74,442 to £66,489 (Rs. 7,44,420 to Rs. 6,64,890); £8125 (Rs. 81,250) were remitted and £3126 (Rs. 31,260) left outstanding. [Bom. Gov. Rev. Rec. 17 of 1847, 77, 82, 122,150. The details are:

Poona Tillage and Revenue, 1843-1845.

| SUB- | | 1843-44. | | | | | | | | |
|-----------|-----------|----------|-------------|---------------|--------------|--|--|--|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. | | | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | | | |
| Shivner | 176 | 150,326 | 23,089 | 235 | 1,44,311 | | | | | |

| Indapur | 80 | 222,515 | 161 | 277 | 78,711 |
|---------------|--------|-----------|--------|------|----------|
| Khed | 184 | 104,063 | 5371 | 194 | 99,068 |
| Pabal | 57 | 147,984 | 511 | 559 | 98,915 |
| Purandhar | 69½ | 147,983 | 12,012 | 885 | 86,763 |
| Bhimthadi | 69 | 150,366 | 48 | 177 | 81,753 |
| Haveli | 83 | 97,116 | 930 | 2047 | 85,239 |
| Maval | 180 | 32,709 | 620 | - | 60,365 |
| Poona City | 2 | 2220 | 175 | 38 | 7966 |
| Grazing | | | | 86 | 1331 |
| Total | 9001/2 | 1,055,282 | 42,917 | 4498 | 7,44,422 |
| Baramati | 21 | | 2346 | 354 | 24,388 |
| Bhimthadi | | | | | |
| Purandhar | 11 | | | | |
| Haveli | 11 | | | | |
| Pabal | | | | | |
| Total | 9321⁄2 | | 45,263 | 4852 | 7,68,810 |

<mark>continued</mark>

| SUB- | | 1844-45. | | | | | | |
|-----------|----------|----------|-------------|---------------|--------------|--|--|--|
| DIVISION. | Village. | Tillage. | Remissions. | Outstandings. | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 144,682 | 33,007 | 808 | 1,28,573 | | | |
| Indapur | 80 | 227,089 | 20,022 | 3174 | 56,663 | | | |
| Khed | 1841/2 | 105,133 | 5015 | 123 | 1,00,006 | | | |
| Pabal | 57 | 145,997 | 75 | 2098 | 92,118 | | | |
| Purandhar | 691/2 | 158,350 | 1057 | 15,471 | 82,908 | | | |
| Bhimthadi | 69 | 149,855 | 21,963 | 4684 | 53,512 | | | |

| Haveli | 85 | 99,295 | 99 | 4670 | 89,718 |
|---------------|-----|-----------|--------|--------|----------|
| Maval | 180 | 32,726 | 13 | 233 | 60,039 |
| Poona City | | | | | |
| Grazing | 1 | | - | | 1353 |
| Total | 901 | 1,063,127 | 81,251 | 31,261 | 6,64,890 |
| Baramati | 21 | | 6270 | 1736 | 17,534 |
| Bhimthadi | | | | | |
| Purandhar | 11 | | 4874 | 324 | 6975 |
| Haveli | 11 | | 40/4 | 324 | 09/5 |
| Pabal | | | | | |
| Total | 933 | | 92,395 | 33,321 | 6,89,399 |

In the surveyed villages of Haveli tillage showed a decrease from 87,310 to 87,021 acres, and, in the unsurveyed villages, an increase from 12,026 to 12,274 acres.]

The people of Bhimthadi and Indapur were suffering and miserable. Of £8125 (Rs. 81,250) or $10\frac{1}{2}$ per cent remissions, £7499 (Es. 74,990) or 92 per cent were given in the late-crop sub-divisions of Junnar, Indapur, and Bhimthadi. The good soil and abundant irrigation in Purandhar prevented the necessity of remissions. Mr. Inverarity, 27th February 1846, Bom. Gov. Rev. Rec. 17 of 1847, 86.1 The failure of rain showed that the great increase in tillage which especially in Indapur and Bhimthadi in the east had followed the introduction of Mr. Goldsmid's settlement was by no means an unmixed improvement. In February 1846 Mr. Inverarity remarked that the main causes of the fall in tillage were the poverty of the landholders and the exhaustion of soil from constant cropping. The more highly assessed lands had fallen waste because the unthrifty habits of the people led them to till for a few seasons the poorer waste fields rather than spend time and labour in renewing by artificial means the exhausted powers of the more valuable lands. [Mr. Inverarity, Collector, Feb. 1846, Bom. Gov. Rev. Rec. 17 of 1847, 81-86. A succession of bad seasons had caused a decline in tillage, increased remissions, and increased advances. Many of the people had lost heart and mortgaged fields with standing crops to village Vanis. As a mortgage of land in most cases ended in complete transfer of the proprietary right, a body of landholders

possessing capital might in time be formed. Mr. Inverarity, Collector, Feb. 1846, Bom. Gov. Rev. Rec. 17 of 1847, 97-98.]

1845-46.

In 1845-46 matters were worse even than in 1844-45. Want of rain especially in the east destroyed the late crops. It was only by a sudden rise in the price of grain that landholders were saved from ruinous loss. At Indapur the rupee price of Indian millet or *jvari* rose from about 120 to 72 pounds (60-36 *shers*). Over the whole district collections fell from £68,940 to £68,517 (Rs. 6,89,400 to Rs. 6,85,170); £10,546 (Rs. 1,05,460) or 1288 per cent were remitted and £2776 (Rs. 27,760) left outstanding. [Bom. Gov Rev Rec. 15 of 1848,10, 11, 60-63, 72,100, 134, Rev. Rec. 23 of 1849, 80. The details are;

Poona Tillage and Revenue, 1844-1846.

| SUB- | 1844-45. | | | | | | |
|-----------|-----------|-----------|-------------|---------------|--------------|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. | | |
| | | Acres. | Rs. | Rs. | Rs. | | |
| Shivner | 176 | 144,682 | 33,007 | 808 | 1,28,573 | | |
| Indapur | 80 | 227,089 | 20,022 | 3174 | 56,663 | | |
| Khed | 184½ | 105,133 | 5015 | 123 | 1,00,006 | | |
| Pabal | 57 | 145,997 | 75 | 2098 | 92,118 | | |
| Purandhar | 69½ | 158,350 | 1057 | 15,471 | 82,908 | | |
| Bhimthadi | 69 | 149,855 | 21,963 | 4684 | 53,512 | | |
| Haveli | 85 | 99,295 | 99 | 4670 | 89,718 | | |
| Maval | 180 | 32,726 | 13 | 233 | 60,039 | | |
| Grazing | | 1 | | | 1353 | | |
| Total | 901 | 1,063,127 | 81,251 | 31,261 | 6,64,890 | | |
| Baramati | 21 | | 6270 | 1736 | 17,634 | | |
| Bhimthadi | 11 | | 4874 | 324 | 6975 | | |
| Purandhar | 11 | | 40/4 | 324 | 09/3 | | |

| Haveli | | | | |
|--------|-----|------------|--------|----------|
| Pabal | | | | |
| Lapsed | | | | |
| Total | 933 | 92,395 | 33,321 | 6,89,399 |

continued..

| SUB- | | 1845-46. | | | | | | |
|-----------|-----------|-----------|-------------|------------------|--------------|--|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Out standings | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 147,214 | 11,469 | 415 | 1,53,305 | | | |
| Indapur | 101 | 252,302 | 57,351 | 5752 | 37,127 | | | |
| Khed | 1841⁄2 | 104,755 | 1215 | 587 | 1,03,723 | | | |
| Pabal | 57 | 149,323 | | 41 | 97,392 | | | |
| Purandhar | 761/2 | 169,666 | 2051 | 6873 | 1,02,194 | | | |
| Bhimthadi | 71 | 146,442 | 32,988 | 10,000 | 37,635 | | | |
| Haveli | 96 | 98,432 | 24 | 2762 | 93,168 | | | |
| Maval | 180 | 33,954 | 358 | 1328 | 60,630 | | | |
| Grazing | | | | | | | | |
| Total | 932 | 1,102,088 | 1,05,456 | 27,768 | 6,85,174 | | | |
| Baramati | | | | | | | | |
| Bhimthadi | | | | | | | | |
| Purandhar | | | | _ | | | | |
| Haveli | | | | | | | | |
| Pabal | | | | | | | | |
| Lapsed | 6 | | 491 | 225 | 3663 | | | |
| Total | 938 | | 1,05,947 | 27,983 | 6,88,837 | | | |

Of the whole remissions 85 per cent were granted in Indapur and Bhimthadi. The people were so impoverished that the rule against remissions in finally surveyed villages had to be broken. The scale on which remissions were granted was, if the crop was half a failure a quarter of the rent was remitted; if nine-sixteenths a failure six-sixteenths were remitted, if ten-sixteenths half was remitted, if eleven-sixteenths ten-sixteenths were remitted, if twelve-sixteenths eleven-sixteenths were remitted, and if more than twelve-sixteenths had failed the whole rent was remitted. In Bhimthadi and Indapur about 15,000 acres passed out of tillage. Large numbers of people on the verge of starvation were employed in making a road from Patas to Indapur. [Bom. Gov. Rev. Rec. 15 of 1848, 60-63, 72-74. The waste in Indapur increased to about 24,000 acres, Bom. Gov. Sel. CVII. 37.]

1846-47.

The season of 1846-47 was favourable. The early rain was somewhat scanty, but especially in the east the late harvest was excellent. [Mr. Courtney, Collector, 10th December 1846, Bom, Gov. Rev. Rec. 15 of 1848, 74; Rev. Rec. 23 of 1849, 18-19.] At Indapur the rupee price of Indian millet or *jvari* rose from about 72 to 30 pounds (36-15 *shers*). Over the whole district the tillage area rose from 1,102,088 to 1,148,755 acres and the collections from £68,517 to £81,561 (Rs. 6,85,170 to Rs. 8,15,610); £1928 (Rs. 19,280)or $2\frac{1}{4}$ per cent were remitted and £2247 (Rs. 22,470) left outstanding. [Bom. Gov. Rev.Rec. 23 of 1849, 80,171,178. The details are:

Poona Tillage and Revenue, 1845-1847.

| SUB - | 1845-46. | | | | | | |
|-----------|-----------|----------|-------------|---------------|--------------|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. | | |
| | | Acres. | Rs. | Rs. | Rs. | | |
| Shivner | 176 | 147,214 | 11,469 | 415 | 1,53,305 | | |
| Indapur | 101 | 252,802 | 57,351 | 5752 | 37,127 | | |
| Khed | 1841/2 | 104,756 | 1215 | 587 | 1,03,723 | | |
| Pabal | 57 | 149,828 | | 41 | 97,392 | | |
| Purandhar | 761⁄2 | 169,666 | 2051 | 6878 | 1,02,194 | | |

| Bhimthadi | 71 | 146,442 | 32,988 | 10,000 | 37,635 |
|-----------|-----|-----------|----------|--------|----------|
| Haveli | 86 | 98,432 | 24 | 2762 | 93,168 |
| Mavel | 180 | 83,964 | 358 | 1328 | 60,630 |
| Total | 932 | 1,102,088 | 1,05,456 | 27,758 | 6,85,174 |
| Lapsed | 6 | | 491 | 225 | 3663 |
| Attached | | | | | |
| Total | 938 | | 1,05,947 | 27,983 | 6,88,837 |

continued..

| SUB - | | 1846-47 | | | | | | |
|-----------|-----------|-----------|------------|---------------|--------------|--|--|--|
| DIVISION. | Villages. | Tillage. | Remission. | Outstandings. | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 159,468 | 2845 | 42 | 1,73,488 | | | |
| Indapur | 101 | 254,972 | 3077 | 7828 | 94,565 | | | |
| Khed | 1841/2 | 112,514 | 2320 | 172 | 1,09,895 | | | |
| Pabal | 57 | 154,264 | 601 | 187 | 99,408 | | | |
| Purandhar | 771/2 | 179,113 | 6117 | 1976 | 1 07,971 | | | |
| Bhimthadi | 71 | 153,518 | 4291 | 6501 | 71,175 | | | |
| Haveli | 89 | 100,271 | 17 | 5310 | 93,852 | | | |
| Mavel | 181 | 34,635 | 15 | 457 | 65,252 | | | |
| Total | 937 | 1,148,755 | 19,283 | 22,473 | 8,15,606 | | | |
| Lapsed | | | | | | | | |
| Attached | 9 | | 1962 | 1857 | 6352 | | | |
| Total | 946 | | 21,245 | 24,330 | 8,21,958 | | | |

There were besides in 1846-47, 979 Government hamlets or *vadis* and 249 alienated Tillages and 58 alienated hamlets or *vadis*.]

Remissions fellfrom twelve to 2% percent and about 40,900 acres of land assessed at £3450 (Rs. 84,500) were taken for tillage. [Bom.

Gov. Rev. Rec. 23 of 1849, 65, 83-85. Remissions wore still necessary, Writing on the 21st of December 1847 Mr. Courtney the Collector expressed the opinion that in bad seasons remissions would continue necessary. The landholders were notoriously improvident, few had any capital. Instead of saving any surplus which remained after a plentiful season, they squandered it on some religious or family ceremony. [Bom. Gov. Rev. Rec. 23 of 1849, 172-173.] The new settlement had been introduced into the Supa petty division of Purandhar in 1844. It proved so successful that notwithstanding that the Government demand was so much lowered and the two last seasons (1844 and 1845) were indifferent, the increase of revenue had more than repaid the cost of the settlement. For the three years before the survey the actual collections on account of the land tax were £9909 (Rs. 99,090) and for the three years after the survey the corresponding amount was £12,484 (Rs. 1,24,840) that is an increase of 24 per cent. [Lieut. Evans, assistant superintendent of survey, 13 of 18th Feb. 1847 para 2.]

1847-48.

In 1847-48 the rains were not so good as in the preceding year. At Indapur the rupee price of Indian millet or *ivari* fell from about 30 to 96 pounds (15-48shers). [Bom. Gov. Sel CVII. 74. Writing on the 21st of December 1847 (Bom. Gov. Rev. Rec. 23 of 1849,173-174) Mr. Courtney the Collector said, 'The great cheapness of grain is likely in the present season to occasion some difficulty in realizing the revenue from the cultivating classes. The price of all descriptions of agricultural produce is now full 25 or 30 per cant lower than it was at this time last year, and as the landholder must look to the sale of his crop alone for the money with which to pay his revenue, a season of excessive cheapness is not by any means so favourable to him as to the rest of the community.' Over the whole district the tillage area rose from 1,148,755 to 1,228,304 acres and 610 -Rs, 8,18,450); £2462 (Rs, 24,620) or 2.8 per cent were remitted, and £718 (Rs. 7180) left outstanding. [Bom. Gov. Rev. Rec. 16 of 1850, 42, 43, 76. The details are: Poona Tillage and Revenue, 1846-1848.

| CLID | | 1846-47. | | | | | |
|------------------|-----------|----------|-------------|--------------------|--------------|--|--|
| SUB- DIVISION | Villages. | Tillage. | Remissions. | Out- standings. | Collections. | | |
| | | Acres. | Rs. | Rs. | Rs. | | |

| Shivner | 176 | 159,468 | 2845 | 42 | 1,73,488 |
|-----------|--------|-----------|--------|--------|----------|
| Indapur | 101 | 254,972 | 3077 | 7828 | 94,565 |
| Khed | 1841/2 | 112,514 | 2320 | 172 | 1,09,895 |
| Pabal | 57 | 154,264 | 601 | 187 | 99,408 |
| Purandhar | 771/2 | 179,113 | 6117 | 1976 | 1,07,971 |
| Bhimthadi | 71 | 153,518 | 4291 | 6501 | 71,175 |
| Haveli | 89 | 100,271 | 17 | 5310 | 93,852 |
| Maval | 181 | 34,635 | 15 | 457 | 65,252 |
| Total | 937 | 1,148,755 | 19,283 | 22,473 | 8,15,606 |
| Attached | 9 | | 1962 | 1857 | 6352 |
| Total | 946 | | 21,245 | 24,330 | 8,21,958 |

continued..

| CLID | | 1847-48. | | | | | | |
|------------------|-----------|-----------|-------------|--------------------|--------------|--|--|--|
| SUB- DIVISION | Villages. | Tillage. | Remissions. | Out- standings. | COLLECTIONS. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 168,448 | 13,870 | 129 | 1,70,597 | | | |
| Indapur | 101 | 289,378 | 5197 | 3748 | 1,00,888 | | | |
| Khed | 184½) | 112,055 | 3204 | 24 | 1,08,470 | | | |
| Pabal | 58 | 164,982 | 938 | 22 | 1,04,605 | | | |
| Purandhar | 771/2 | 212,382 | 907 | 1657 | 97,497 | | | |
| Bhimthadi | 72 | 144,403 | | 1020 | 75,467 | | | |
| Haveli | 88 | 100,486 | 50 | 576 | 96,390 | | | |
| Maval | 182 | 36,170 | 456 | 1 | 64,537 | | | |
| Total | 939 | 12,28,304 | 24,622 | 7176 | 8,18,451 | | | |
| Attached | 12 | | 2172 | 930 | 7939 | | | |
| Total | 951 | | 26,794 | 8106 | 8,26,888 | | | |

In 1847 the thirty years revenue survey settlement was introduced into the Sasvad mamlatdar's division of Purandhar. The survey was began in 1843 and finished in 1847. This group contained thirty-sewn Government villages. Of these one was at the foot of the Purandhar fort and therefore dwindled after the garrison was reduced. It had no lands attached to it; those belonging to the fort were not measured at the former survey. Six of these villages had lately lapsed to Government. Bajri and jvari were the chief grains. In the south-west villages bajri alternated with monsoon jvari, wheat, and gram; and gram was not unfrequently grown as a cold-weather crop on land from which bdjri had been reaped. There were a few patches of rice in the hill villages near the fort of Purandhar, and a small quantity of land was watered by the Karha river, and in one or two villages from perennial streams. A line of hills, an offshoot from the Purandhar range, divided Purandhar from the settled sub-divisions of Poona, Haveli, and Bhimthadi. The town of Sasvad sixteen miles from Poona, was on the made road between Poona and Satara by the Bapdev pass. This pass was very steep, and, as its ascent required an additional air of bullocks, it was but little used by carts. The chief portion of the surplus produce of this group was conveyed to the Poona market by pack-bullocks. The Purandhar mamlatdar's station was at Sasvad where a market was held every Monday. Those of the landholders who could it, preferred taking their grain to Poona Lieutenant Evans the assistant superintendent of survey writing on the 18t of February 1847, inclined to think that not much was sold locally. The small quantity of rice that was grown was sold and used on the spot, chiefly at Purincha and Sasvad. At Sasvad millet rupee prices had risen for bajri from about 54 pounds (27 shers) in 1837-38 to about 35 ½ pounds (17½ shers) in 1845-46 and for *jvari* from about 82 pounds (41 ahera) to about 31½ pounds (15¾ shers). [The details are:

Sasvad Millet Rupee Prices, 1837-1846.

| YEAR. | Bajri. | Jvari. | YEAR. | Bajri. | Jvari. |
|-------------|--------|--------|---------|--------|--------|
| | shers. | Shers. | | Shers. | Shers. |
| 1837- 38 | 27 | 41 | 1845-46 | 17¾ | 15¾ |
| 1838- 39 | 31 | 28 | Total | 334¾ | 3081/2 |

| 1839- 40 | 21 | 35 | Add | 15 | 19¾ |
|-------------|-----|-------|--------------------|------|-------|
| 1840- 41 | 27¾ | 35½ | Poona <i>shers</i> | 249¾ | 327¾ |
| 1841- 42 | 22 | 321/2 | Average | 27¾ | 861/4 |
| 1842- 43 | 30¾ | 46 | | | |
| 1843- 44 | 36 | 45 | | | |
| 1844- 45 | 21½ | 29¾ | | | |

]

In fifteen villages of this survey group, during the ten years ending 1846-47, the tillage area rose from 13,473 acres assessed at £1772 (Rs. 17,720) in 1837-38 to 16,882 acres assessed at £2112 (Rs. 21,120); remissions fell from £207 (Rs. 2070) to £19 (Rs. 190), and collections rose from £1565 (Rs. 15,650) to £2093 (Rs. 20,930), The details are:

Purandhar Tillage and Revenue, 1837-1847.

| YEAR. | Tillage. | Rental. | Remis- sions. | Collec- tions. | YEAR. | Tillage. | Rental. | Remis- sions. | Collec- tions. |
|-------------|----------|---------|------------------|-------------------|-------------|----------|---------|------------------|-------------------|
| | Acres. | Re. | Re. | Rs. | | Acres. | Rs. | Rs. | Rs. |
| 1837- 38 | 13,473 | 17,719 | 2072 | 15,647 | 1842- 43 | 15,669 | 19,982 | 3078 | 16,904 |
| 1838- 39 | 13,667 | 17,824 | 2516 | 15,308 | 1843- 44 | 15,532 | 19,870 | 2558 | 17,312 |
| 1839- 40 | 14,057 | 18,206 | 1728 | 16,478 | 1844- 45 | 15,254 | 19,219 | 335 | 18,884 |
| 1840- 41 | 15,011 | 19,300 | 5266 | 14,034 | 1845- 46 | 15,586 | 19,644 | 66 | 19,578 |
| 1841- 42 | 15,239 | 19,445 | 5194 | 14,251 | 1846- 47 | 16,882 | 21,120 | 187 | 20,933 |

To assess their dry-crop lands the thirty-six villages were arranged into four classes. In the first class were placed ten villages and they were charged acre rates of 2s. 3d. (Rs. 1/8), 1s. 101/2d. (15 as.), and ls. 3%d. (10 ½ as.) for black lands; 1s. 6%d. (12 ½ as.), 1s. 1%d. (9½) aa.), and 9% d. (6% as.) for red lands; and 11%d. (7% as.), 7%d. $(4^5/6 \text{ as.})$ and $4^3/4 \text{ d.}$ $(3^1/6 \text{ as.})$ for brown or barad lands. In the second class were placed fifteen villages with acre rates of ls. 111/2d. (153/3) as)., 1s. $7\frac{1}{2}d$. (13 as.), and 1s. $1\frac{3}{4}d$. ($9\frac{1}{6}$ as.) for black lands; 1s.4½d. (11 as.), 1s. (8 as.) and $8 \frac{1}{2} d$. (5 $\frac{5}{12}$ as.) for red lands; and 101/8d. (6 aa.), 61/4d. (41/6 as.), and 41/8d. (23/4 as.) for brown or barad lands. In the third class were placed nine villages with acre rates of 1s. 9%d. (14½ as.), 1s. 5¾ad. (11 5 /6as.), and 1s. ½d. (8⅓ as.) for black lands; 1s. $2\frac{3}{4}$ d. $(9\frac{5}{6})$, $10\frac{8}{6}$ d. $(7\frac{1}{4} as.)$, and $7\frac{1}{2}$ d. (5 as.) for red lands; 9%d. $(6^{1}/12 as)$, 5%d. $(3^{5}/6 as.)$, and 3%d. (2% as.) for brown or barad lands. The two remaining villages wereassessed at the Suparates. The rice lands were of trifling extent. The rates proposed by Lieutenant Evans the assistant superintendent were 6s. (Rs. 3), 4s. 6d. (Rs. $2\frac{1}{2}$), and 3s. (Rs. $1\frac{1}{2}$). These rice rates, compared with the dry-crop rates, were, in the opinion of Captain Wingate, rather high than low. Having no experience of the rice cultivation of this district he however could not give any decided opinion as to their fitness. Government authorized the Collector to make any reductions in the proposed rates which he and Lieutenant Evans the assistant superintendent of survey might deem necessary at the time of introducing them. Grass lands unfit for grain found within the limits of a landholder's field were assessed at acre rates of 14d. and 21dd. $(^{10}/12 \text{ as.} \text{ and } 1^{5}/12 \text{ as.})$. As the extent and value of hill lands were but trifling, Governments authorized the Collector to continue the existing mode of assessing them unless he could introduce some other system whose working could be more easily and efficiently superintended by the district officers without being distasteful to the cultivators. [Lieutenant Evans, assistant superintendent, 13 of 18th February 1847; Captain Wingate, Superintendent of Survey, 128 of 6th October 1847; Government Letter 544 of 26th January 1848.] The effect of the dry-crop or *jirayat* settlement was to reduce the revenue of the tillage area from £4906 (Rs. 49,060) in 1846-47 to £3390 (Rs. 33,900) in 1847-48 or 30 per cent. [Mr. Reeves, Collector, 2842 of 1st Oct. 1849.].

Baramati,1847-48.

In 1847-48 the survey settlement was introduced into twenty villages of the Baramati group in Indapur. These villages lapsed in 1844-45. The tillage area in twenty-one villages rose from 44,987 *bighas* in

1837-38 to 48,214 bighas in 1842-43 and fell to 42,544 bighas in 1845-46. Collections including cesses rose from £1538 (Rs. 15,380) in 1837-38 to £1933 (Rs. 19,330) in 1845-46 The details are:

Baramati Tillage and Revenue, 1837-1848.

| YEAR | .Villages | Sc | ATE OR | | RATE OR «ti. | L | EASE <i>Kau</i> | D OR ıli. | GAF | RDEN. |
|-------------|-----------|---------|---------------------------|-------------------|-----------------|-----|--------------------|--------------|-----------|-----------------|
| | | Area. | Rental. | Area. | Rental. | Aı | rea. | Renta | al. Area. | Rental. |
| | | Bighas. | Rs. | Bighas. | Rs. | Big | jhas. | Rs. | Bighds | Rs. |
| 1837 38 | 21 | 4960 | 4946 | 25,632 | 11,915 | 14, | ,315 | 4188 | 30 | 147 |
| 1842 43 | 21 | 6917 | 7402 | 20,955 | 8495 | 20, | ,312 | 7803 | 30 | 147 |
| 1843 44 | 21 | 4616 | 4764 | 24,890 | 11,817 | 17, | ,817 | 7204 | 30 | 147 |
| 1844 45 | 21 | 4651 | 4861 | 25,558 | 12,036 | 15, | ,737 | 6912 | 2 135 | 212 |
| 1845 46 | 21 | 5553 | 5585 | 25,440 | 12,049 | 11, | ,416 | 5392 | 2 135 | 237 |
| | | Acres | | Acres. | | Ac | cres. | | | |
| 1846 47 | 20 | 6881 | 9209 | 22,907 | 15,037 | 4 | 1737 | 3268 | 3 | |
| 1847 48 | 20 | 56,174 | 27,495 | | | 1 | .732 | 696 | 5 | 769 |
| | | ТОТ | AL. | | | D | EDU | CT. | | |
| YEAR. | Area. | Rental. | Cesses and Grazing. | Total Revenue. | Remissio | ns. | Villa Expe | age nses. | Total. | Net Revenue. |
| | Bighas. | Rs. | Rs. | Rs. | Rs. | | R | s. | Rs. | Rs. |
| 1837- 38 | 44,937 | 21,196 | 1203 | 22,399 | 3. | 47 | 6 | 669 | 7016 | 15,383 |
| 1842- | 48,214 | 23,847 | 181 | 24,028 | 84 | 49 | 4 | 957 | 5806 | 18,222 |

| 43 | | | | | | | | |
|-------------|--------|--------|------|--------|------|------|--------|--------|
| 1843- 44 | 47,353 | 29,932 | 959 | 24,891 | 2346 | 5776 | 8122 | 16,769 |
| 1844- 45 | 46,081 | 24,021 | 1519 | 25,540 | 6270 | 3926 | 10,195 | 15,345 |
| 1845- 46 | 42,544 | 23,263 | 1351 | 24,614 | 5283 | | 5283 | 19,331 |
| | Acres. | | | | | | | |
| 1846- 47 | 34,525 | 27,514 | 1017 | 28,531 | 2428 | 7003 | 9431 | 19,100 |
| 1847- 48 | 57,906 | 28,960 | 813 | 29,773 | 5245 | 6471 | 11,716 | 18,057 |

The new acre rates were for black lands 1s. $7\frac{3}{4}$ *d.* $(13^{1}/6 \text{ as.})$, 1s. 4d $(10\frac{2}{3} \text{ as.})$, and $11\frac{1}{8}$ *d.* $(7^{5}/12\text{as.})$; for red lands 1s. $1\frac{1}{4}$ *d.* $(8^{5}/6\text{as.})$.8 $\frac{3}{4}$ d(5 $\frac{5}{6}$ fos.) and 5*d.* $(3\frac{1}{3} \text{ as.})$, and for barad or rocky lands 6 $\frac{5}{8}$ d $(4^{5}/12\text{as.})$, 4d. $(2\frac{1}{3} \text{ as.})$, and 2d $\frac{1}{2}$. $(1\frac{1}{3} \text{ as.})$. Ukti or short rates were in use until the new assessment was introduced in 1847-48 when both the ukti the short and the sosti or full rate tenures ceased. About 1730 acres were allowed to be held on istava kaul or rising leases either till the lease expired or till the amount was as high as the survey assessment. [Bom. Gov. Rev. Rec. 205 of 1849, 192-195.] Compared with. £2108 (Rs. 21,080) the average collections of the fire years ending 1846-47, £2896 (Rs. 28,960) the survey rental on the area under tillage showed a rise of 37 per cent. There were 11,693 acres of waste assessed at £479 (Rs. 4790). [Mr. Bell, assistant superintendent, 25th November 1848; Bom, Gov. Rev. Rec. 205 of 1849, 173, 180, 187, 200, 201, 224, 227, 231, 247.]

In October 1849, in submitting the settlement report to Government, the Revenue Commissioner Mr. Townsend remarked that to a certain extent every new assessment must be viewed as an experiment, the success of which could be estimated only by the experience of some years. He pressed upon Government the necessity of opening more roads. In this group of villages no improvement could be expected unless a good road was made to Baramati. Government had done much to lessen their demands. Unless trade was encouraged by the opening of roads, after a few years a further reduction in the Government demand would be necessary. [Bom. Gov. Rev. Rec. 205 of 1849, 176.] Govern-ment approved of the settlement. At the same time they observed, apparently in reference to the increase of 37 per

cent in this survey group, that both the Revenue Commissioner and the Collector should watch with care the working of the new rates. Government had sanctioned the preliminary arrangements made under the late Lieutenant Nash's superintendence with no feeling of confidence. It should be considered as a standing rule that when rates submitted for approval are compared with the rates obtaining in districts where the assessment had been for some time revised, the manner in which that revised assessment has worked should be fully shown. [Gov. Letter 7214 of 6th Dee. 1848, Bom. Gov. Rev. Rec. 205 of 1849, 249.]

1848-49.

1848-49 was an average season. Untimely and scanty rain injured the early crops, but the late harvest was more favourable. Remissions rose from 2.8 to 4.9 per cent. At Indapur the rupee price of Indian millet or *jvari* fell from about 96 to 144 pounds (48-72 *shers*). Over the whole district the tillage area fell from 1,228,304 to 1,227,898, acres and the collections from £81,845 (Rs. 8,18,450) to £77,535 (Rs. 7,75,350); £4061 (Rs.40,610) or 49 per cent were remitted and £1184 (Rs. 11,840) left outstanding. [Bom. Gov. Rev. Rec. 24 of 1851, 7, 13, 47, 62. The details are:

Poona Tillage and Revenue, 1847 - 1849

| SUB- | | 1847-48 | | | | | | |
|-----------|-----------|----------|-------------|--------------------|--------------|--|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Out- standings. | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 168,448 | 13,870 | 129 | 1,70,597 | | | |
| Indapur | 101 | 289,378 | 5197 | 3748 | 1,00,888 | | | |
| Khed | 1841/2 | 112,055 | 3204 | 24 | 1,08,470 | | | |
| Pabal | 58 | 164,982 | 938 | 22 | 1,04,605 | | | |
| Purandhar | 771/2 | 212,382 | 907 | 1657 | 97,497 | | | |
| Bhimthadi | 72 | 144,403 | | 1020 | 75,467 | | | |
| Haveli | 88 | 100,486 | 50 | 576 | 96,890 | | | |
| Maval | 182 | 36,170 | 456 | | 64,537 | | | |

| Total | 939 | 1,228,304 | 24,622 | 7176 | 8,18,451 |
|--------------|-----|-----------|--------|------|----------|
| Sequestrated | 12 | | 2172 | 930 | 7937 |
| Total | 951 | | 26,794 | 8106 | 8,26,888 |

continued..

| SUB- | | | 1848-49. | | |
|--------------|-----------|-----------|-------------|--------------------|--------------|
| DIVISION. | Villages. | Tillage. | Remissions. | Out- standings. | Collections: |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 168,270 | 21,068 | 832 | 1,39,843 |
| Indapur | 101 | 291,165 | | 1530 | 1,08,410 |
| Khed | 1851/2 | 112,733 | 18,918 | 29 | 94,606 |
| Pabal | 58 | 167,037 | 421 | 72 | 1,03,885 |
| Purandhar | 771/2 | 210,738 | 40 | 998 | 97,789 |
| Bhimthadi | 72 | 140,438 | 18 | 8055 | 68,178 |
| Haveli | 88 | 101,708 | 50 | 315 | 98,239 |
| Maval | 182 | 35,809 | 95 | 7 | 64,405 |
| Total | 940 | 1,227,898 | 40,610 | 11,838 | 7,75,355 |
| Sequestrated | 15 | | 4,530 | 1393 | 8462 |
| Total | 955 | | 45,140 | 13,231 | 7,83,817 |

1

In 1848-49 Bhimthadi was far from prosperous. Mr. Reid the assistant collector wrote on the 25th of February 1850, ' I do not see how Bhimthadi will ever be a paying district. Its population is scanty, the rains are variable, and its assessment compared with that of the neighbouring districts of Supa and Indapur is heavy.' [Mr. Reid, second assist, collector, 25th Feb. 1800, Bom. Gov. Rev. Rec. 16 of 1880. 206; Gov. Letter 9756 of 21st Dec 1850, Gov. Rev. Rec. 16 of 1850, 238-244.]

Bori, 1848-49.

In 1848 the survey settlement was introduced into the Bori petty division of Junnar. The survey of this group was begun in 1842, but with the object of completing the survey of Mangoli in Sholapur survey operations in Bori remained at a stand from 1842 to 1845. Work was begun in 1845 and was finished in 1846. Bori was bounded on the north by the rangeof hills of the Brahmanvadi petty division of Junnar, on the east by the Nagar district, on the south by Pabal, and on the west by the Haveli villages of Junnar. Of the thirty villages included in this survey group one village was annexed in 1836. The climate of Bori was almost the same as the climate of north Pabal. From the point westward where Bori adjoined the Junnar-Haveli group the supply of rain became gradually more uncertain and less plentiful, till, at the point where Bori joined the Ahmadnagar district, the fall was very uncertain. The chief grains were millets, wheat, and gram. There were 1304 ploughs, 338 carts, and 7950 bullocks.- Of 2455 landholders 2044 were *mirasdara* or hereditary holders, 293 were *upris* or casual holders, and 118 were ovandkaris or strangers. According to Mr. Pringle's survey there were 74,865 acres of Government arable land and 5093 acres of alienated land or a total of 79,958 acres assessed at £7863 (Rs. 78,630) that is an average acre rate of 1s. $11\frac{1}{2}d$. (15?as.). Of the Government arable area 24,813 acres were waste, and 50,052 acres were under tillage. The rental on the tillage area was £5110 (Rs. 51,100) or 2s. $\frac{1}{2}d$. (Re. 1as. $\frac{1}{2}$) the acre. The area held for tillage increased from 46,420 in 1829 to 50,052 acres in 1846. Remissions during the sixteen years ending 1845 averaged £1035 (Rs. 10,350), and during the five years ending 1846 averaged £741 (Rs. 7410). Bori being a long slip of land lying in a line parallel with Pabal, and the climate and market prices in both being much the same, the Pabal rates with a slight increase on the red land were proposed for Bori The details are:

Bori Survey Bates, 1846.

| SOIL. | Class I. 6Villages. | Class II. 16 Villages. | Class III. 8 Village!. |
|-----------|---------------------|------------------------|------------------------|
| | Res* | Res | Res. |
| 1st Black | 590 | 490 | 390 |
| 2nd do. | 470 | 390 | 310 |
| 3rd do. | 330 | 270 | 220 |

^{*} Four hundred rat equal one rupee or two shillings.

Poona Waste, 1848-49.

| CUD | | Waste. | | | | Waste. | |
|------------------|---------|--------|--------------|-------------------|-----------|---------|-------------|
| SUB- DIVISION | Arabia. | Area. | Per- Cent | SUB- DIVISION. | Arable. | Area. | Per Cent |
| | Acres. | Acres. | | | Acres. | | |
| Shivner | 228,018 | 59,747 | 26.2 | bhimthadi | 217,280 | 76,842 | 35.37 |
| Indapur | 315,539 | 24,375 | 7.52 | Haveli | 114,374 | 12,666 | 11.07 |
| Khed | 170,796 | 58,063 | 34.00 | Maval | 75,391 | 39,583 | 52.50 |
| Pabal | 182,051 | 15,013 | 8,22 | Total | 1 521 266 | 202 469 | 19.82 |
| Purandhar | 237,917 | 17,179 | 7.52 | TOLAI | 1,531,366 | 303,468 | 19.82 |

Bori Survey Rates, 1846—continued.

| SOIL— continued. | Class I. 6 Villages. | Class II. 16 Villages, | Class III. 8 Villages. |
|---------------------|-------------------------|---------------------------|---------------------------|
| | Res | Res. | Res. |
| 1st Red | 450 | 350 | 260 |
| 2nd do. | 325 | 250 | 180 |
| 3rd do. | 175 | 130 | 110 |
| 1st <i>Barad</i> | 210 | 180 | 140 |
| 2nd do. | 120 | 100 | 80 |
| 3rd do. | 70 | 60 | 50 |

The area of watered land was considerable. Of 657 wells twenty-nine were in alienated land; there were also numerous small channels. From both sources a total area of 4100 acres were watered. Many of these channels were used only in seasons of more than average rainfall. In seasons of moderate rain many of them were without water. It was proposed that the rental on these channels should not be demanded except when they were used. Under the former surrey the acre rate on the garden land was 6s. (Rs. 3), but only a small portion (48 acres) of the watered land was included under this head. It was

proposed to impose the Pabal garden land rate of 4s. (Rs. 2) in Bori. According to the new survey the garden area amounted to 4100 acres and the rental to £472 (Rs. 4720) or an average acre rate of a little more than 2s. (Re.1). [As the supply of water was not enough to cover the whole garden area at the came time, each holder watered part of his land in turns so that the actual amount of land watered at one time was far lest than 4100 acres.] The details are:

Bori Settlement, 1846.

| VILLAGES. | FORMER. | SURVRY. | | | | |
|-----------|-----------|---------|-----------|---------|--------|--------|
| | Rental on | Amabla | Occ pied. | | | Waste. |
| | Tillage. | Arable. | Dry Crop. | Garden. | Total. | Waste. |
| | Rs. | Acres. | Rs. | Rs. | Rs. | Rs. |
| 30 | 54,643 | 98,514 | 40,310 | 4,719 | 45,038 | 10,480 |

During the preceding five years the average remissions were about £740 (Rs. 7400). Deducting this sum from the former rental on the tillage area and comparing the balance with the survey rental on the occupied area there appears a reduction of about 4½ per cent. The proposed settlement was sanctioned in September 1848. [Capt. Landon, aast sunt. 9th Oct. 1846; Iieut. Nash, Supt. 280 of 2nd Nov. 18461 Capt Wingate, Supt. 8onthem Maratha Country, 152 of 11th Aug. 1848; Gov. Utter to the Eev. Comr, 6160 of 4th Sept. 1848.]

1849-50.

1849-50 seems to have been a less favourable year than 1848-49. There was a fall in the tillage area of 31,179 acres. At the same time remissions declined from 4.9 to 3.9 per cent. At Indapur the rupee price of Indian millet or *jvari* was the same as in the previous year, about 144 pounds (72 *shers*). Over the whole district the tillage area fell from 1,227,898 to 1,196,719 acres and the collections from £77535 (Rs. 7,75,350) to £76,243 (Rs. 7,62,430); £3148 (Rs. 31,480) or 3.9 per cent were remitted, and £1076 (Rs. 10,760) left outstanding. [Bom. Gov. Rev. Rec. 24 of 1851, 211, 220, 270. The details are:

Poona Tillage and Revenue, 1848-1850.

| Sub-Division. | 1848-49. | | | | | | | |
|---------------|----------|-----------|-------------|---------------|--------------|--|--|--|
| | | | Remissions. | Outstandings. | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | 168,270 | 21,068 | 832 | 1,39,843 | | | |
| Indapur | 101 | 291,165 | | 1530 | 1,08,410 | | | |
| Khed | 1851/2 | 112,733 | 18,918 | 29 | 94,606 | | | |
| Pabal | 58 | 167,037 | 421 | 72 | 1,03,885 | | | |
| Purandhar | 771/2 | 210,738 | 40 | 998 | 97,789 | | | |
| Bhimthadi | 72 | 140,438 | 18 | 8055 | 68,178 | | | |
| Haveli | 88 | 101,708 | 50 | 315 | 98,239 | | | |
| Maval | 182 | 35,809 | 95 | 7 | 64,405 | | | |
| Total | 940 | 1,227,898 | 40,610 | 11,838 | 7,75,355 | | | |
| Sequestrated | 15 | | 4530 | 1393 | 8462 | | | |
| Total | 955 | | 45,140 | 13,231 | 7,83,817 | | | |

continued..

| Cub Division | 1849-50. | | | | | | | |
|---------------|-----------|--------------------------------|--------|---------------|--------------|--|--|--|
| Sub-Division. | Villages. | /illages. Tillage. Remissions. | | Outstandings. | Collections. | | | |
| | | Acres. | | Rs. | Rs. | | | |
| Shivner | 176 | 178,344 | 14,370 | 3196 | 1,26,825 | | | |
| Indapur | 101 | 273,595 | | 5418 | 99,461 | | | |
| Khed | 185½ | 112,247 | 16,539 | 37 | 98.004 | | | |
| Pabal | 58 | 159,014 | | | 1,01,715 | | | |
| Purandhar | 771/2 | 203,025 | 198 | 231 | 96.106 | | | |
| Bhimthadi | 72 | 131,504 | | 1115 | 71,924 | | | |
| Haveli | 88 | 102,770 | 226 | 681 | 1,01,190 | | | |
| Maval | 182 | 36,220 | 150 | 81 | 67,204 | | | |

| Total | 940 | 1,196,719 | 31,483 | 10,759 | 7,62,429 |
|--------------|-----|-----------|--------|--------|----------|
| Sequestrated | 13 | | 4325 | 1311 | 6907 |
| Total | 953 | | 35,808 | 12,070 | 7,69,336 |

1

In 1849 the survey settlement was introduced into a group of twentysix villages of the Brahmanvadi petty division of Junnar. The remaining nine hill villages which contained chiefly occasional hill crop and rice land were left until the survey of this class of land was undertaken. Brahmanvadi was bounded on the north and east by the Ahmadnagar district, on the south by Bori another petty division of Junnar, and on the west by Madh Khore and Harishchandra hill. The hill or dang villages lay on the west side of the Brahmanvadi petty division between it and the Harishchandra hill. Brahmanvadi was separated from Bori by a line of hills steep on the south or Bori side and sloping and broken on the north or Brahmanvadi side. In this survey group there were two streams the Kas and the Mul. The Kas was generally dry in January, it had a very deep bed with numerous deep ravines running at right angles from it on either side. The Mul stopped running by February, but had numerous pools which held water all the year. Brahmanvadi was on the high road from Poona to Nasik about a quarter of a mile from the top of the Brahmanvadi pass. The Brahmanvadi villages were badly off for roads. There was a made-road forty miles from Poona to Narayangaon. From Narayangaon, though not made, the road was fair for fourteen miles to the foot of the Brahmanvadi pass. The ascent of this pass was difficult. The pathway was blocked with boulders or crossed by sloping sheet-rock very dangerous for laden animals. From 10,000 to 15,000 head of cattle yearly crossed this pass loaded with grain chiefly bajri which they carried to Junnar and Poona and returned laden with salt. There was another road leading out of the Brahmanvadi petty division by Ale where, some years before, part of the road over the Ale pass had been made. At Utur a village in this survey group the rupee price of bajri was about 62 pounds (31 shers) in 1842-43, about 72 pounds (36 shers) in 1843-44, about 62 pounds (31 shers) in 1844-45, and about 38 pounds (19 shers) in 1845-46. The following statement shows the tillage and revenue daring the fifteen years ending 1846-47:

Brahmanvadi Tillage and Revenue, 1832- 1847.

| YEAR | Tillage. | Rental. | Remissions. | Collections. | |
|---------|----------|---------|-------------|--------------|--|
| | Acres. | Rs. | Rs. | Rs. | |
| 1832-33 | 30,140 | 32,772 | 15,863 | 16,909 | |
| 1833-34 | 33,807 | 35,525 | 247 | 35,278 | |
| 1834-35 | 33,912 | 36,955 | 778 | 36,177 | |
| 1835-36 | 33,513 | 36,349 | 1248 | 34,101 | |
| 1836-37 | 33,341 | 36,361 | 20,191 | 15,170 | |
| 1837-38 | 35,119 | 36,937 | 1115 | 35,822 | |
| 1838-39 | 33,863 | 35,704 | 15,857 | 19,847 | |
| 1839-40 | 36,941 | 37,580 | 5904 | 31,676 | |

continued...

| YEAR. | Tillage. | Rental. | Remissions. | Collections. | |
|---------|----------|---------|-------------|--------------|--|
| | Acres. | Rs. | Rs. | Rs. | |
| 1840-41 | 37,698 | 38,229 | 1213 | 37,016 | |
| 1841-42 | 37,315 | 38,102 | 9182 | 28,920 | |
| 1842-43 | 37,678 | 38,410 | 659 | 37,751 | |
| 1843-44 | 37,583 | 38,665 | 5887 | 32,778 | |
| 1844-45 | 30,537 | 38,141 | 5628 | 32,513 | |
| 1845-46 | 37,223 | 38,417 | 1550 | 36,867 | |
| 1846-47 | 39,897 | 40,377 | 190 | 40,187 | |

Daring the fifteen years ending 1846-47, of the average tillage area of 85,711 acres assessed at £3703 (Rs. 37,030), part was granted on short or *ukti* rates or on lease or *kauli* rates. The average remissions were £570 (Its. 5700) and the collections £3133 (Rs. 31,330) from 39,711 acres that is a nominal average acre rate of 1s. 9d. (14 as.). [Captain Landon, 171 of 29th September 1848,paras 15, 19, and ststement 2. These averages do not agree with the figures in the ststement.] The correct acre rate was much lower as revised measurement showed that the number of assessable acres was much greater than those entered in the former survey record. Captain

Landon the survey officer attributed the increase in the number of arable acres to the fact that land bordering on fields, which had not been assessed because it was thought too poor for tillage, had been brought under cultivation and improved. This Captain Landon thought might also account for the irregular shape of many fields and for the absence of boundary marks. The new survey left no land unmeasured, field adjoined field, and where there was a space between two fields, it was included in one or other field if it was of small extent and not fit for tillage. If it yielded grass it was assessed as grass land. Patches of bare rock were deducted from the number of assessable acres. In the best soil the former measurement was found generally correct and the shape of the field more regular. This was probably because the whole of such land had been measured.

The twenty-six villages were arranged in four classes with highest drycrop acre rates 150 to 30 per cent higher than Indapur. The details are:

Brahmanvadi Survey Rates, 1849-50.

| SOIL | | BRAHMANVADI. | | | | | | | |
|-----------|--|--------------|--------------------------------------|--|--|--|--|--|--|
| | Indapur Rates. 150 per cent higher 1 Village. | | 100 per cent higher 1 Village. | 60 per cent higher 13 Villages. | 30 per cent higher 11 Villages. | | | | |
| | Res. | Res. | Res. | Res. | Res. | | | | |
| 1st Black | 300 | 750 | 600 | 480 | 390 | | | | |
| 2nd do. | 240 | 600 | 480 | 354 | 312 | | | | |
| 3rd do. | 170 | 425 | 340 | 272 | 221 | | | | |
| 1st Red | 200 | 500+50 | 400+50 | 320 | 260 | | | | |
| 2nd do. | 130 | 130+50 | 260+50 | 208 | 269 | | | | |
| 3rd do. | 75 | 187 | 150 | 120 | 97 | | | | |
| 1st Barad | 100 | 250 | 200 | 160 | 130 | | | | |
| 2nd do. | 60 | 150 | 130 | 96 | 78 | | | | |
| 3rd do | 35 | 87 | 70 | 56 | 45 | | | | |

^{*} FOUR hundred *res* equal one rupee or two shillings.

For the small quantity of grass growing on the edges and rocky parts of the cultivated fields an acre rate of $1\frac{1}{2}d$. (1 a.) was proposed. It was proposed to rate a few acres of yery rich river alluvial or dheli soil at 3d. (2 as.) and 6d. (4 as.) higher than the first black. Of rice land there were about twenty-six acres for which acre rates of 6s, (Rs. 3), 4s. 6d. (Rs. 2¼), and 3s. (Rs. 1½) were proposed. For garden land an acre rate of 4s. (Rs. 2) for well-watered, and of 6s, (Rs. 3) to 2s. (Re. 1) for channel-watered land was proposed. The average rate of the existing settlement on land held for tillage was, according to the former measurement, 2s. 3d. (Rs. $1\frac{1}{2}$), and according to the new measurement 1s. 6?d. $(12^5/12 \text{ as.})$. The average acre rate according to the proposed assessment was 1s. 1 $\frac{1}{4}d$. (8⁵/6 as.) According to Mr. Pringle's settlement in the twenty-six villages there were 51,938 arable acres assessed at £4862 (Rs. 48,620) or an average acre rate of 1s. 10%d. (14¹¹/12 as.). According to the revised measurement the arable area was 70,756 acres which gave an average acre rate of 1s. 4%d. ($10^{11}/12$ as.). There were besides 21,544 acres of grass land on the hills not measured by Mr. Pringle's survey. It was proposed to let them by auction or makta as was done in the case of grass lands or kurans.

The following statement shows that the survey settlement reduced the Government demand from £3336 (Rs. 33,360) the average collections of the ten years ending 1846-47 to £2856 (Rs. 28,560) the survey rental on the dry-crop and garden tillage area, that is a reduction of 14 per cent. The details are:

Brahmanvadi Settlement, 1849.

| | | FOR | MER. | | SURVEY. | | | | | | | |
|----|-------------------------------|---------|--------------|---|---------|-------------|-------|---------|------------------|------|--------|--|
| | | 18 | 37-184 | 17. | | Cultivated. | | | Waste. | | | |
| | Villages. Total Rental. | | Danie Calles | | Rental. | | | | Total Rental. | | | |
| Ke | Kentai. | Rental. | sions. | nis-Collec- ns. tions. Area. Dry- Crop. Garde | Garden. | Total. | Area. | Rental. | ixciitai. | | | |
| | Rs. | Rs. | Rs. | Rs. | Acres. | Rs. | Rs. | Rs. | Acres. | Rs. | Rs. | |
| 26 | 48,622 | 38,016 | 4652 | 33,364 | 51,724 | 27,426 | 1131 | 28,557 | 18,932 | 4419 | 32,976 | |

The proposed rates were sanctioned with the modification that the first black rate for Utur in the first class should be reduced from 3s. 9d. to 3s. 3d (750 to 650 res); this change reduced the total survey rental by about £130 (Rs. 1300). [The assistant superintendent Captain Landon, 171 of 29th September 1848 Captain Wingate, 236 of 22nd December 1848; Mr. Townsend, Rev. Comr. 483 of 29th January 1849; Gov. Letter 1368 of 24th February 1849.]

1850-51.

The season of 1850 was on the whole unfavourable. Partial and irregular falls of rain injured both the early and the late crops. The parts of the district which suffered most were Bhimthadi and the east or plain parts of Junnar, Khed, Pabal, and Maval. Remissions amounted to about 29 per cent in Bhimthadi, 11 in Khed, 8in Purandhar, 3 in Indapur, and ¾ to 1¾ in other sub-divisions. Over the whole district the remissions showed an increase from 3.9 to 66 per cent. At Indapur the rupee price of Indian millet or *jvari* rose from about 144 to 76 pounds (72-38 *shers*). Over the whole district the tillage area rose from 1,196,719 to 1,215,015 acres, and the collections fellfrom£76,243(Rs.7,62,430)to£73,032(Rs. 7,30,320); £5196 (Rs. 51,960) or 6.6 per cent were remitted, and £417 (Rs.4170) left outstanding. [Bom. Gov. Rev. Rec. 18 of 1852, 5, 6, 10,14,19,82. The details are:

Poona Tillage and Revenue, 1849-1851.

| SUB- | | 1849-50. | | | | | |
|-----------|-----------|----------|-------------|---------------|--------------|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. | | |
| | | Acres. | Rs. | Rs. | Rs. | | |
| Shivner | 176 | 178,344 | 14,370 | 3196 | 1,26,825 | | |
| Iadapur | 101 | 273,595 | | 5418 | 99,461 | | |
| Khed | 1851/2 | 112,247 | 16,539 | 37 | 98,004 | | |
| Pabal | 58 | 159,014 | | | 1,01,715 | | |
| Purandhar | 771/2 | 203,025 | 198 | 231 | 96,106 | | |
| Bhimthadi | 72 | 131,504 | | 1115 | 71,924 | | |
| Haveli | 88 | 102,770 | 226 | 681 | 1,01,190 | | |

| Maval | 182 | 36,220 | 150 | 81 | 67,204 |
|--------------|-----|-----------|--------|--------|----------|
| Total | 940 | 1,196,719 | 31,483 | 10,769 | 7,62,429 |
| Sequestrated | 13 | | 4325 | 1311 | 6907 |
| Total | 953 | | 35,808 | 12,070 | 7,69,336 |

continued..

| SUB- | | | 1850-51 | | |
|--------------|-----------|-----------|-------------|---------------|--------------|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 196,637 | 1764 | 17 | 1,23,338 |
| Iadapur | 99 | 271,007 | 3513 | 558 | 1,01,706 |
| Khed | 185½ | 112,758 | 12,838 | | 1,01,394 |
| Pabal | 58 | 154,354 | 1,903 | 358 | 99,376 |
| Purandhar | 761/2 | 203,896 | 8,236 | 1931 | 87,880 |
| Bhimthadi | 72 | 136,762 | 21,802 | 159 | 63,157 |
| Haveli | 88 | 102,297 | 1,338 | 1145 | 97,397. |
| Maval | 182 | 38,294 | 562 | | 66,077 |
| Total | 937 | 1,215,015 | 51,961 | 4168 | 7,30,324 |
| Sequestrated | 15 | | 3466 | 936 | 6845 |
| Total | 952 | | 55,427 | 5104 | 7,87,169 |

Poona Waste, 1850-51.

| CLID | | Waste. | | CLID | | Waste. | |
|-------------------|---------|--------|---------------|-------------------|---------|--------|-------------|
| SUB- DIVISION. | Arable. | Area. | Per- Cent. | SUB- DIVISION. | Δrania | Area. | Per Cent |
| | Acres. | Acres. | - | | Acres. | Acres | |
| shivner | 260,187 | 63,549 | 24.40 | Bhimthadi | 217,222 | 81,461 | 37.50 |
| Indapur | 307,724 | 36,717 | 11.92 | Haveli | 114,967 | 12,670 | 11.00 |

| Khed | 170,930 | 58,172 | 34.02 | Maval | 75,416 | 37,122 | 49.00 |
|-----------|---------|--------|-------|-------|-----------|---------|-------|
| Pabal | 182,116 | 27,752 | 15.22 | Total | 1,553,320 | 336,305 | 21.77 |
| Purabdhar | 224,758 | 20,862 | 9.27 | | | | |

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Junnar 1850-51.

In 1850-51 the thirty years' revenue survey settlement was in traduced into 109 villages of Junnar, [Bom. Gov. Sel. LXX, 67.] For revenue and magisterial purposes the Shivner or Junnar subdivision included three divisions, one in charge of a mamlatdar and two in charge of mahalkaris. The mamlatdar was stationed at Junnar and the mahalkaris at Brahmanvadi and Bori. The survey settlement was introduced into the thirty villages of the Bori group in 1848, into the twenty-six villages of the Brahmanvadi group in 1849, and into the 109 villages of the Junnar group in 1850-51. The Junnar group was bounded on the north by the Brahmanvadi petty division and part of the Akola sub-division in Ahmadnagar, on the east by the Bori petty division, on the south by Pabal and Khed, and on the west by the Sahyadri hills. Numerous distinct spurs stretched east and southeast from the Sahyadris gradually falling into the plain. The extreme west was very rugged, and so broken by ravines that bullock and plough tillage was generally impossible. Its place was taken by a hand tillage known as dali. Further east the valleys broadened and the usual form of tillage became general. From the town of Junnar on the west to the Bori petty division on the east was a tract known as the Hayeli group. A happy combination of favourable rainfall and fertile soil made this one of the richest spots in the Deccan. Nowhere else in Poona was the fall of rain so genial and so certain; nowhere else did wheat and other grains yield such, abundant crops. [Surv. Supt. 205 of 25th Nov. 1850, Bom. Gov. Sel. LXX. 69-70.] In the rainy west rice was the staple product, the only dry-crops being nachni, sava, khurasni, and other upland grains. So greatly did the excess of moisture deteriorate and exhaust the soil that after yielding for three or four years the land required taree or four years of rest. From this wet western tract eastwards rice gradually disappeared as the wheat gram and millet lands of the Haveli group were approached. The western villages had often not. more than a scanty population of hardy and simple hillmen. The houses were generally small roofed sheds. Their wants were few, and especially during the rains they were often left without crafts-men or traders. In the Haveli group the houses were comparatively well built, and the village communities had the usual staff of crafts-men.

The chief and the most central local market was Junnar; the other leading market towns were Utur and Narayangaon. The rates fixed on the survey and assessment of Junnar carried out under Mr. Pringle were introduced in 1829-30, and till 1850 continued to be the basis of the British revenue collections. During the three years after Mr. Pringle's settlement tillage was stationary; during the fourth year it slightly increased. Bach of these four year (1829 -1833) was marked by a yearly fall in revenue. The years 1833-34 and 1834-35 are remarkable as almost the full assessment on the cultivated land was realized. 1836 was evidently a bad season, but, as liberal remissions were given, in the following year the revenue reached its former standard. 1838 was a year of short rain and the remissions amounted to about 45 per cent of the assessment. The effects of this unfavourable season appear to have been felt for the succeeding three years from which time there is nothing remarkable till 1846. In 1848 probably because of the favorrable character of the two previous years, the area of land under tillage was greater than in any preceding year of the whole period. The unfavourable season of 1849 caused a decline in tillage. During the twenty-one years ending 1849-50 the tillage area varied from 47,000 acres in 1829-30 to 58,000 acres in 1848-49; the collections varied from £3500 (Rs. 35,000) in 1838-39 to £6500 (Rs. 65,000)in 1842-43, and averaged £5466 (Rs. 54,660) or 2s. $\frac{1}{2}d$. (Re. 1 $a^{1}/6$) the acre. In the ten years ending 1849-50 the collections avenged £5835 (Rs. 58,350) or 2s. ?d. (Re. 1 us. $^{7}/12$) the acre. The details are:

Junnar Tillage and Revenue, 1829 -1850.

| YEAR. | Tillage. | Remissions. | Collections. | YEAR. | Tillage. | Remissions. | Collections. |
|-------------|----------|-------------|--------------|--------------|----------|-------------|--------------|
| | Acres. | Rs. | Rs. | | Acres. | Rs. | Rs. |
| 1829- 30 | 47,000 | 1000 | 58.000 | 1636- 37. | 52,500 | 22,000 | 42,000 |
| 1830- 31 | 47,200 | 11,000 | 47,000 | 1837- 38 | 56,000 | 3000 | 63,000 |
| 1831- 32 | 47,000 | 15,000 | 48,000 | 1838- 39 | 56,000 | 30,000 | 35,000 |
| 1832- 33 | 52,000 | 20,000 | 43,000 | 1839- 40 | 56,200 | 20,000 | 48.000 |
| 1833- 34 | 53,000 | 200 | 63,000 | 1840- 41 | 56,000 | 7000 | 60,000 |

| 1834- 35 | 53,000 | 100 | 64,000 | 1841- 41 | 56,200 | 16,000 | 51,000 |
|-------------|--------|-----|--------|-------------|--------|--------|--------|
| 1835- 36 | 52,500 | 400 | 63000 | 1842- 43 | 56,300 | 4000 | 65,000 |

continued...

| YEAR. | Tillage. | Ramissions. | Collection |
|---------|----------|-------------|------------|
| | Acres | Rs. | Rs. |
| 1843-44 | 56,300 | 10,000 | 58,000 |
| 1844-45 | 55,000 | 15,000 | 50,000 |
| 1845-46 | 55,000 | 8000 | 57,000 |
| 1846-47 | 57,000 | 4000 | 65,000 |
| 1847-48 | 57,000 | 5000 | 65,000 |
| 1848-49 | 58,000 | 10,000 | 60,000 |
| 1849-50 | 56,000 | 15,000 | 53,000 |

These figures are given from the survey diagram for 109 Junnar villages, The old *kamal or* total arable area of this group was 75,000 acres and the old *kamal* or total rental was £8300 (Rs. 83,000). Bom. Gov. Bel. LXX. 73.]

In 1850 the people of Junnar were badly off. The balk of them appeared to be deep in the moneylenders' books, almost literally living from hand to mouth. The few exceptions seemed to be people who held their lands on favourable terms owing to some inequality in the existing assessment. A great redaction in the Government demand seemed called for. [Bom. Gov. Sel. LXX. 75] To ensure this redaction rates were proposed, which on the land under tillage in 1850 reduced the Government demand 34 per cent. [Bom. Gov. Sel. LXX. 116..] The 109 villages were arranged into five classes whose highest dry-crop acre rates varied from 3s. 6d. (Rs. 1 34) in the first class to 1s. 6d. (12 as.) in the fifth class. The first class included twenty-two villages in the east of the Haveli group and in the valley of the Kukdi river, extending to the town of Junnar, the tract which has been described as one of the most fertile spots in the Deccan. They were charged a highest dry crop acre rate of 3s. 6d. (Rs. 134). The second class included twentyfour villages lying generally to the west of the first class and was

charged a highest dry-crop acre rate of 3s. (Rs. 1½). In this group though the fall of rain was larger, the soil was much less rich. The third class included nineteen villages with a highest dry crop acre rate of 2s. 6d. (Rs. 1¼), and the fourth class contained thirty-four villages with a corresponding rate of 2s. (Re. 1). The division between the third and fourth classes was the change of products and cultivation from wheat and bajri to hill grains. The fifth class contained ten villages charged at a rate of 1s. 6d. (12 as.); they were on the tops and slopes of the Sahyadris. As rice tillage was entirely dependent on the rainfall two sets of acre rates, 6s. (Rs. 3) and 5s. (Rs. 2½), were introduced, according as the land lay within or on the skirts of the belt of heavy rainfall. The watered land was either channel-watered or well-watered. The Superintendent proposed for well-watered land an acre rate of 4s. (Rs. 2) in excess of the highest dry-crop rates except in the specially rich gardens to the east of Junnar for which he proposed a rate of 8s. (Rs. 4). For channel watered or patasthal land the Superintendent proposed acre rates varying from 2s. (Re. 1) to 6s. (Rs. 3) in excess of the highest dry-crop acre rates. A special acre rate of 12s. (Rs. 6) was proposed for the Hafiz garden about two miles to the east of Junnar which had an unfailing supply of water. In the hilly lands in the west, which were known as the cutting forest or dali ran, the Superintendent proposed to continue the former system of the billhook or koyta cess. Instead of the uniform koyta rate of 1s. 6d. (12 as.) the Superintendent recommended three rates, 1s. 3d. (10 as.) for the villages of the fifth class, 1s. 6d. (12 as.) for the villages of the fourth class, and 2s. (Re. 1) for small patches of billhook tillage in the second and third classes. The total survey rental, including dry-crop, garden, rice, hill-side, and grazing, amounted to £5536 (Rs. 55,360). Compared with £5667 (Rs. 56,670) the average collections of the previous twenty-one years (1829-1850), the total survey rental showed a reduction of £131 (Rs. 1310) or 2.31 per cent. The following statement shows the effect of the survey:

Junnar Settlement, 1850-51.

| CLASS. | | | FORMER. | | |
|--------|----------------------|-------|-----------------------------------|--------|---------------------------|
| | | 1829- | 1850. | | 1849-50. |
| | Dry-Crop and Garden. | Rice. | Grazing and <i>Dali</i> Lands. | Total. | Dry-Crop Rice and Garden. |
| | Rs. | Rs. | | | |

| I | 28,400 | | 183 | 28,583 | 28,081 |
|-------|--------|------|------|--------|--------|
| II | 14,313 | 21 | 151 | 14,485 | 13,474 |
| III | 4616 | 295 | 236 | 5147 | 4698 |
| IV | 4378 | 2193 | 353 | 6924 | 5688 |
| V | 553 | 688 | 292 | 1533 | 1217 |
| Total | 52,260 | 3197 | 1215 | 56,672 | 53,158 |

continued...

| | SURVEY. | | | | | | |
|--------|---------|---------|--------|---------|---------------------------------|--------------------------------------|--------|
| CLASS. | Dry- | Crop. | Rio | ce. | Garden. | C | |
| | Area | Rental. | Area. | Rental. | Well and Channel watered. | Grazing and <i>Dali</i> Lands. | Total, |
| | Acres. | Rs. | Acres. | Rs. | Rs | Rs. | Rs. |
| I | 27.057 | 23,722 | | | 2173 | 88 | 25,983 |
| II | 23.426 | 12,986 | 24 | 23 | 903 | 159 | 14,071 |
| III | 13,364 | 4928 | 313 | 303 | 81 | 293 | 5605 |
| IV | 17,693 | 5042 | 1710 | 2041 | | 527 | 7610 |
| V | 6017 | 1001 | 640 | 686 | | 409 | 2096 |
| Total | 87,557 | 47,679 | 2687 | 3053 | 3157 | 1476 | 55,365 |

The Superintendent's proposals were approved and sanctioned by Government in April 1851. The only exceptions were that the settlement of the garden lands was not approved; that the old uniform billhook rate was preferred to the proposed three classes; and that in the case of lands which required fallows the rates should be taken every year and not only when crops were grown. [Gov. Letter 41S0 of 15th April 1851. Rom. Gov. Sel. LXX. 141-146.]

1851-52.

The season of 1851 was again unfavourable. An abundant early rainfall was followed by a failure of the late rain and great loss of crops. At

Indapur the rupee price of Indian millet or *jvari* fell from about 76 to 80 pounds (38-40 *shers*). Over the whole district the tillage area rose from 12,15,015 to 12,73,394 acres, and the collections from £73,032 to £80,462 (Rs. 7,30,320-Rs. 8,04,620), £2835 (Rs. 28,350) or 3.3 per cent were remitted, and £326 (Rs. 3260) left outstanding. [Bom. Gov. Rev. Rec. 15 of 1855, 74, 90, 118 - 120, 148. The details are:

Poona Tillage and Revenve, 1850 -1852.

| CLID | | | 1850-51. | | |
|-------------------|-----------|-----------|-------------|-------------------|--------------|
| SUB- DIVISION. | Villages. | Tillage. | Remissions. | Out- standings | Collections. |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 196,637 | 1764 | 17 | 1,23,338 |
| Indapur | 99 | 271,007 | 3513 | 558 | 1,01,706 |
| Khed | 185½ | 112,758 | 12,338 | | 1,01,394 |
| Pabal | 58 | 154,364 | 1908 | 358 | 99,375 |
| Purandhar | 76½ | 203,896 | 8236 | 1931 | 87,880 |
| Bhimtbadi | 72 | 135,762 | 21,802 | 159 | 53,157 |
| Haveli | 88 | 102,297 | 1338 | 1145 | 97,397 |
| Maval | 182 | 38,294 | 562 | | 66,077 |
| Total | 937 | 1,215,015 | 51,961 | 4168 | 7,30,324 |

continued...

| SUB- | 1851-52. | | | | | | | |
|-----------|-----------|----------|-------------|---------------|--------------|--|--|--|
| DIVISION. | Villages. | Tillage. | Remissions. | Outstandings. | Collections. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | | 1074 | 57 | 1,32,059 | | | |
| Indapur | 99 | | 1603 | 52 | 1,07,461 | | | |
| Khed | 1871/2 | | 15,422 | 530 | 1,05,919 | | | |
| Pabal | 58 | | 4 | 17 | 1,00,260 | | | |

| Purandhar | 771/2 | | 4687 | 348 | 1,07,393 |
|-----------|-------|-----------|--------|------|----------|
| Bhimtbadi | 73 | | 2803 | 88 | 80,936 |
| Haveli | 89 | | 2759 | 2166 | 1,00,209 |
| Maval | 182 | | | | 70,386 |
| Total | 942 | 1,273,394 | 28,352 | 3258 | 8,04,623 |

Remissions in Khed and Haveli alone were in excess of the previous year, and these were only granted in unsurveyed villages where the old system of petitions and inspection of individual losses was in force; and where considerable damage had been sustained owing to the want of rain. In the surveyed villages of the northern sub-divisions no remissions were given on account of failure of rain. Of the remissions shown against Junnar about Rs. 900 were nominal being the difference between the highest or *kamal* rental and the actual amount of settlement of one alienated village under attachment. The large amount of remissions for failure in the southern sub-divisions was rendered necessary by the general unproductiveness of the season]

Ambegaon, 1851-52.

In 1851-52 the survey settlement was introduced into the Ambegaon petty division of Khed. [Lieut. Francis, Surv. Supt. 235 of 4th Dec. 1851, and Gov. Res. guoted in Gov. Letter 1624 of 9th March 1852 to the Rev. Comr. S. D. This group formed a narrow belt of country stretching from the Sahyadris on the west to the borders of Pabal on the east; it had Junnar on the north and the remaining portion of Khed on the south. It comprised the petty divisions of Ghode, Ambegaon, and Malunga, and contained fifty-eight villages one of which, Sal, had lapsed the previous year. The mavals or western portions of Ambegaon and Junnar were much alike. There was perhaps a smaller extent of comparatively level country in the mavals of Ambegaon than in those of Junnar. The products of Ambegaon and Junnar were likewise very similar, but in the plain or desh portion of Ambegaon cultivation was almost entirely confined to early crops of millets both bajri and jvari. The proportion of late crop was perhaps less than onesixteenth of the whole. Wheat and gram were grown as second crops where there was irrigation from wells and channels. The potato was considered one of the ordinary products of the plain villages though it was not so much grown, nor, except in Ghode town, was the country so suited to its growth as in the neighbouring villages of the Ausari petty division of Pabal. Two potato crops were raised in the year. The first was planted in the early part of the monsoon; the after-crop was

planted in December, but it was only where irrigation was available that it could be raised at this season. The potato seemed to be a favourite crop with the landholders chiefly on account of the ready sale the produce met with, to dealers who made a practice of visiting this part of the Deccan to buy for the Bombay and Poona markets. The other products of the Ambegaon group were sold by the landholders to the Vanis of Ghode, Senoli, and Ambegaon. At each of these three places there was a market. Ambegaon was a great store for rice, and Ghode was the chief market for other grains. Senoli was a small and unimportant market. Mr. Pringle's survey settlement was introduced into the Ambegaon group in 1829-30. During the twenty-two years ending 1850-51 the survey diagram showed that tillage fell from 25,000 acres in 1829-30 to 21,250 in 1831-32, and again rose to 26,000 in 1836-37. In the next three years it fell to 25,800 in 1839-40 and again rose to 27,500 in 1840-41. In the next three years it fell to 24,500 in 1843-44 and during the remaining seven years, with a rise in one and a fall in another year, it varied between 25,000 in 1845-46 and 26,250 in 1846-47, 1848-49, and 1850-51. Remissions were Rs. 3000 in 1829-30 and 1830-31, Rs. 1700 in 1831-32 and 1832-33, Rs. 2500 in 1836-37, Rs. 1250 in 1837-38, Rs. 2500 in 1838-39 and 1839-40, and Rs. 1300 In 1843-44, 1844-45, and 1850-51; in other years they were less than Rs. 600. The collections fell from Rs. 14,500 in 1829-30 to Rs. 12,500 in 1830-31, and steadily rose to Rs. 17,000 in 1835-36. In the. next four years, except 1837-38 when they were Rs. 17,000, they stood at Rs. 15,000, and rose to Rs. 18,000 in 1840-41. They fell to Rs. 15,500 in 1841-42, rose to Rs. 17,500 in 1842-43, and again fell to Rs. 16,250 in 1843-44. After that they steadily rose to Rs. 18,000 in 1846-47 and fell to Rs. 17,000 in 1850-51. According to the Survey Superintendent Lieutenant Francis, during this whole period, the remissions were very small showing an abatement of only 7½ per cent. In December 1851 he remarked, 'If it can be shown that under an assessment that has been in operation for so considerable a period, the resources of the group have not been impaired, that cultivation has extended accompanied with a corresponding increase of revenue, a redaction proportionate, to the extent of remissions would seem all that is now required. 'Lieut. Francis had passed through the group in 1850 and had also visited it during December 1851. He was satisfied that the bulk of the landholders were in fair circum-stances. In the hilly west or maval part of the group the holdings were small, and the landholders' means were generally very limited; still, as far as he could learn, few of them were in the habit of leaving their villages to seek employment in Bombay or elsewhere, being able to support themselves on the produce of their fields. Considering the superior climate of this group he was of opinion that a new assessment equal to

the amount of former collections would effect all the reduction called for. The rates he proposed were 3s., 2\%s., 2\%s., and 2s. (Rs. 1\%, Rs. 1?, Rs. 1¼, and Re. 1) for dry-crop lands. For rice lands one uniform rate of 6s. (Rs. 3) was proposed. 1063 acres were under rice and their assessment at the revised rates amounted to £133 (Rs. 1330) or an average acre rate of 2s. 6d. (Rs. 11/4). For garden lands, 6s. (Rs.3) for channels and 4s. (Rs. 2) for wells were proposed. The total garden rental amounted to £49 (Rs, 490). Compared with the previous year's collections (Rs. 16,915) in fifty-seven villages the survey rental on the tillage area (Rs.15,936) [IN para 12 of his report the Survey Superintendent compares the revenue at existing rates, Rs. 18,215 including Rs, 1300 of remissions in fifty-seven villages, with the survey rental on the tillage Rs. 16,436 and shows the reduction to be 9³/₄ per cent. In para 20 he adds that Rs. 600 should be deducted on account of remissions for fields increased by new rates and compares the collections Rs, 16,915 with the survey rental Rs. 15,936 and shows the reduction to be 6f per cent, According to the tabular statements Rs. 15,936 should be Rs, 15,486, a change which gives a reduction of 8.7 per cent. showed a reduction of 5% per cent. Including waste and the lapsed village of Sal the survey total amounted to £1951 (Rs, 19,510). Lieut. Francis observed that because of the rather scanty population of some of the village near the Sahyadris, as well as on account of the nature of the soil which required a periodical fallow, the whole of the waste would not be brought under tillage at one time. There was a large extent of hill-land suited only for dali bush-clearing tillage. It had not been divided into numbers, but was left in large tracts for the purpose of being brought nnder the koyta or billhook, system of assessmeent It was proposed to continue the old rate of 1s. 6d, (12 as.) the koyata. The following statement shows the effect of the survey:

Ambegaon Settlement, 1851-52.

| OLAGO VILLA- | FORMER REVENUE. | | | SURVEY. | | | | | | | | | |
|--------------|--------------------|----------------|--------------|--------------|---------------------------------------|--|-------|-----|--------------------------------|------|----------------------|--|--|
| CLASS. | GES. | 1829- 1851. | 1850- 51. | 1850- 51. | · · · · · · · · · · · · · · · · · · · | | Rice. | | Grazing and <i>Dali.</i> | | Dry- Crop Rate | | |
| | | Rs. | Rs. | Rs. | Acres. Rs. | | Acres | Rs. | Rs. | Rs. | Rs. | | |
| I | 7 | 8208 | 8770 | 6760 | | | 60, | 75 | 524 | 8175 | | | |

| | 1 | | 1384 | 663 | 1043 | 624 | 20 | 25 | 1 | 650 | 11/2 |
|-------|----|--------|--------|--------|--------|--------|------|------|------|--------|------|
| II | 11 | 4736 | 5125 | 4555 | 11,349 | 4784 | 166 | 213 | 622 | 5619 | 1% |
| III | 17 | 2651 | 2461 | 2357 | 11,307 | 2662 | 403 | 588 | 242 | 3492 | 11/4 |
| IV | 22 | 2508 | 1859 | 1764 | 20,220 | 3163 | 434 | 450 | 465 | 4078 | 1 |
| Total | 58 | 17,903 | 19.599 | 10,099 | 56,614 | 18,809 | 1083 | 1351 | 1854 | 22,014 | |

The proposed rates were sanctioned by Government in March 1852.

Purandhar.

In the same year the assessments of garden lands in thirty villages and of dry-crop and rice-lands in four villages in the Purandhar subdivision were revised. The former highest rate of assessment on watered land was 10s. (Rs. 5) the bigha The Collector Mr. Reevea, 2842 of 1st October 1849 para 13. or about 13s. 4d. (Rs. $6\frac{2}{3}$) the acre. Under the revision survey twenty-seven villages contained 977 acres of cultivated well-watered garden land which were assessed at an average acre rate of 3s. 3%d. (Re. 1 as. $10^7/12$) or a total of £162 10s. (Rs. 1625), and twenty-one villages contained 1153 acres of cultivated channel-watered land which were assessed at an average acre rate of 4s. $6\frac{4}{4}$. (Rs. 2 as. $4\frac{1}{2}$) or a total of £263 4s. (Rs. 2632). In the four villages the cultivated dry-crop Government land amounted to 4546 acres which were assessed at £86 16s. (Rs. 868) or an average acre rate of $4\frac{1}{2} d$. (3 as.); and the cultivated rice-land amounted to 1081 acres which were assessed at £27 16s. (Rs. 278) or an average acre rate of 3s.34 d. (Re. 1 as. 81/2). Along with the above proposals Lieutenant Francis the Survey Superintendent proposed to reduce the rice rates introduced in 1848 in the mamlatdar's division of Purandhar from 6s. (Rs. 3), 4s. 6d. (Rs. 21/4), and 3s. (Rs. 11/2) to 4s. 6d. (Rs. 2¼), 3s. 6d. (Rs. 1¾), and 2s. 6d. (Rs. 1¼). In confirming the settlement Government ordered the revision of assessment on the rice-lands as proposed by Lieutenant Francis and Captain Wingato. [Lieut. Francis, Survey Superintendent, 1368 of 30th June 1852, 155] of 21st July 1852, and 193 of 3rd September 1852; Mr. Courtney, Revenue Commissioner, 3109 of 21st December 1852; Government Letter 196 of 1853.]

1852-53

The season [Poona Collector's Compilation of 1853, 143, 355.] of 1852 was most favourable. It was one of unusual success to all engaged in agriculture. At Indapur the rupee price of Indian millet or *jvari* fell

from about 80 to 112 pounds (40-56 shers). Over the whole district the tillage area rose from 1,273,394 acres to 1,316,767 acres; the remissions fell from £2835 (Rs. 28,350) to £728 (Rs. 7280), and the outstandings from £326 (Rs. 3260) to £45 (Rs. 450); the land revenue collections showed a fall from £80,462 (Rs. 8,04,620) to £80,072 (Rs. 8,00,720). [The details are:

Poona Tillage and Revenue, 1851 -1853.

| SUB- | | | 1851-52. | | |
|-----------|-----------|-----------|-------------|--------------------|--------------|
| DIVISION. | Villages. | Tillage. | Remissions. | Out- standings. | Collections. |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | | 1074 | 57 | 1,32,059 |
| Indapur | 99 | | 1603 | 52 | 1,07,461 |
| Khed | 187½ | | 15,422 | 530 | 1,05,919 |
| Pabal | 58 | | 4 | 17 | 1,00,260 |
| Purandhar | 771/2 | | 4687 | 348 | 1,07,393 |
| Bhimthadi | 73 | | 2803 | 88 | 80,936 |
| Haveli | 89 | | 2759 | 2166 | 1,00,209 |
| Maval | 182 | | | | 70,386 |
| Total | 942 | 1,273,394 | 28,352 | 3258 | 8,04,613 |

continued...

| SUB- DIVISION. | 1852-53. | | | | | | | |
|-------------------|----------|----------|-------------|-------------------|-------------|--|--|--|
| | Villages | Tillage. | Remissions. | Out standings. | Collection. | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 176 | | 14 | 92 | 1,31,685 | | | |
| Indapur | 99 | | 134 | | 1,10,179 | | | |
| Khed | 1871/2 | | 4257 | | 96,379 | | | |

| Pabal | 58 | | | | 99,824 |
|-----------|-------|-----------|------|-----|----------|
| Purandhar | 771/2 | | 996 | 1 | 1,06,664 |
| Bhimthadi | 73 | | 1601 | 18 | 84,350 |
| Haveli | 89 | | 276 | 341 | 99,308 |
| Maval | 182 | | | | 72,332 |
| Total | 942 | 1,316,767 | 7278 | 452 | 8,00,721 |

The remissions in the whole district amounted to 09 per cent. In Khed, wher he new survey settlement was introduced this year, they amounted to 4.23,in Bhimthadi to 1.86, in Purandhar to 092, in Haveli to 0.27, in Indapur to 0.12, in Shivner or Junnar to 0.01, in Pabal and Maval there were no remissions. Maval was an unsnrveyed subdivision and in it all the revenue was collected without difficulty. Poona Collector's Compilation of 1853, 26, 361. According to early or *kharif* and late or rabi crops there were two divisions of instalments for the collection of revenue, 15th of Dec. 1852, 1st of Feb. 1853, 15th of March 1853, and 1st of May 1853, for early crops; and 15th of Jan., 1st of March, 15th of April, and 1st of June, for late crops. Poona Collector's Compilation of 1853, 370.]

In addition to repairs to five wells, one reservoir, nine village offices, and one rest-house, the new works authorized in the Collectorate during the year were two wells, six village offices, one rest-house and one road. The amount sanctioned for such works during the year ending the 30th of April 1853, under the standing orders of the 4th of September 1835, was £204 (Rs. 2040). [Poona Collector's Compilation of 1863, 392]

The following statement shows the working of the 1841 survey rates in eleven villages of the Haveli sub-division between 1841 and 1853: Bom. Gov, Sel. LXX. 10.]

Eleven Haveli Villages, Survey Results, 1841-1853.

| YEAR. | Tillage. | Rental. | Remissions. | Collections. | Waste. | Rental. |
|---------|----------|---------|-------------|--------------|--------|---------|
| | Acres. | Rs, | Rs. | Rs. | Acres. | Rs. |
| 1841-42 | 7013 | 5269 | 219 | 5050 | 2513 | 1114 |
| 1842-43 | 8350 | 5865 | | 5865 | 1238 | 531 |

| 1843-44 | 8845 | 6062 | | 6062 | 743 | 361 |
|---------|------|------|---|------|------|-----|
| 1844-45 | 8328 | 5837 | | 5837 | 1267 | 588 |
| 1845-46 | 8281 | 5846 | - | 5846 | 1283 | 577 |
| 1846-47 | 8310 | 5927 | | 5927 | 1070 | 460 |
| 1847-48 | 8455 | 5991 | | 5991 | 923 | 395 |
| 1848-49 | 8057 | 6082 | - | 6082 | 746 | 324 |
| 1849-50 | 8971 | 6273 | - | 6273 | 704 | 309 |
| 1850-51 | 9016 | 6315 | | 6315 | 658 | 266 |
| 1851-52 | 9143 | 6367 | | 6367 | 531 | 214 |
| 1852-53 | 9230 | 6383 | | 6383 | 445 | 186 |

SURVEY.

Khed.

In 1852 the thirty years' revenue survey settlement was introduced into the Khed sub-division, [Bom. Gov. Rev. Rec. 172 of 1853.] Khed was one, of the largest subdivisions of Poona. It had two petty divisions Ambegaon and Kuda subordinate to the Khed mamlatdar. The survey settlement was introduced into the Ambegaon group of fifty-eight villages in 1851-52. Gov. Letter 1624 of 9th March 1852, Comp. 48 of 1852; Lieut. J. Francis, Survey. Superintendent, 299 of 24th December 1852; Rev. Rec. 172 of 1853, 95. For the remaining 129 villages, forty-seven under the Khed mamlatdar which stretched further east into the plain country and eighty-two under the Kuda mahalkari, survey rates were proposed in December 1852 and sanctioned in May 1853. [Gov. Res. 2543 of 3rd May 1853, Poona Collector's Compilation of 1853, 37.1 The lands included in these 129 villages stretched about forty miles from west to east with a breadth of twelve to eighteen miles. It was bounded on the north by Ambegaon lying south of Junnar, on the east by Pabal, on the south by Haveli and Maval, and on the west by the Sahyadris. It was separated by a wide chain of hills from Ambegaon on the north and by a second chain of hills from Maval on the south; and besides, two other ranges of hills which passed through its centre, divided it into the three separate valleys of the Bhima and its two feeders the Indrayani and Bam. [Bom. Gov. Rev. Rec. 172 of 1853, 79, 96. The Kuda group lay close to the Sahyadris and contained a considerable area of rice. The mamlatdar's

group lay further east where the climate was not moist enough for rice, but was well suited for dry crops. The climate of the mamlatdar's villages was fully equal to that of Poona-Haveli; it was better than that of Pabal, and was not quite so good as that of the Junnar valley. In respect of markets Khed was not so well placed as Haveli but was better off than either Pabal or Junnar. The husbandry was good for the Deccan, and the people were better off than elsewhere. The better condition of the people was perhaps partly due to the fact that Mr. Pringle's assessment in the villages near the Sahyadris was more liberal than his assessment of the east; it was chiefly because the country seldom suffered from a failure of rain. [Captain G. Wingate, Survey Commissioner, 31 of 13th January 1853; Bom. Gov. Rev. Rec, 172 of 1853,85-87.]

From the survey diagram for 127 villages of this Khed group it appears that the area under tillage was 76,000 acres in 1829-30 and 66,000 in 1830-31 and 1831-32. It rose to 73,000 in 1833-34 and with a slight fall in the next year continually increased till it reached 84,000 acres in 1837-38. With a slight fall in the next year it rose to 86,000 in 1839-40. After 1839-40 it continued to shrink until it reached 79,000 in 1844-45 and 1845-46. During the next five years (1846-1851) it stood at about 85,000 acres, and rose to 88,000 acres in 1851-52. That is during the twenty-three years before the introduction of the revenue survey there was an increase in the area under tillage of 12,000 acres or 15 per cent. During the same twenty-three years (1829-1852) remissions varied considerably. In the first four years they rose from £1200 (Rs. 12,000) in 1829-30 to £1700 (Rs. 17,000) in 1832-33. In the next three years they were £300 (Rs. 3000). In the next four years they rose from £1200 (Rs. 12,000) in 1836-37 to £2500 (Rs. 25,000) in 1838-89 and again fell to £100 (Rs. 1000) in 1839-40. Between 1840 and 1848, except in 1841-42 when they were £1500 (Rs. 15,000), they varied from £200 to £500 (Rs. 2000 - 5000). In the remaining four years (1848-1852) they fell from £1800 (Rs. 18,000) in 1848-49 to £1100 (Rs. 11,000) in 1851-52. In the first four years collections fell from £5500 (Rs. 55,000) in 1829-30 to £4800 (Rs. 48,000) in 1832-33. In the next six years they fell from £6500 (Rs. 65,000) in 1838-34 to £5500 (Rs. 55,000) in 1838-39. In the next nine years, except 1841-42 when they were a little helow £6500 (Rs. 65,000), they rose from £7000 (Rs. 70,000) in 1839-40 to £7700 (Rs. 77,000) in 1847-48. In 1848-49 they fell to £6300 (Rs. 63,000) and from that rose to £7200 (Rs. 72,000) in 1851-52. [Bom. Gov. Rev. Rec. 172 of 1853,169.1

Under the revenue survey settlement the 129 villages of this Khed group were arranged in five classes with highest dry-crop acre rates varying from 3s. 3d. (Rs. 1?) in the first class to 2s. (Re. 1) in the fifth class. The highest rate was applied to a group of villages lying along the Poona-Junnar road. These villages possessed superior advantages for the carriage of produce to Poona and also enjoyed a climate favourable to dry crops. The lower rates were for groups lying east of the Poona-Junnar road where the climate became drier and to the west where the moisture was excessive; the lowest rates were for the Sahyadri villages where *jvari* and *bajri* could not grow. The highest acre rates for rice land were fixed at 8s. (Rs. 4) in the villages near the Sahyadris, 7s. (Rs. 3½) for the next group, and 6s. (Rs. 3) for the group further east where the fall of rain was hardly enough for rice. There were 4425 acres of rice with an assessment of £720 (Rs. 7200), that is an average acre rate of 3s. 3d. (Rs. 1?). The area of garden tillage was small. The highest rates fixed for garden land were, 6s. (Rs. 3) for channel-watered or patasthal and 4s. (Rs. 2) for wellwatered or motasthal. 851 acres of channel-watered land were assessed at £112 (Rs. 1120) and 676 acres of well-watered land at £128 (Rs. 1230). No change was made in the management of hill lands inaccessible to the plough. They continued to be let for cultivation on the billhook or koyta system. The following statement shows the effect of the survey:

Khed Settlement, 1852-53

| | CLASS. VIL- LAGES. | | FORMER | | | | | SURVEY. | | | |
|--------|-----------------------|----------------------------------|------------------------|--------|----------|-----------------------|---------|---------|--|--|--|
| CLASS | | 18 | | : | 1851-52 | | | | | | |
| CLASS. | | Dry-Crop, Rice and Garden. | <i>Dali</i> and Grass. | Total. | 1851-52. | Dry-Crop and Rice. | Garden. | Total. | | | |
| , | | Rs. Rs. | | Rs. | Rs. | Rs. | Rs. | Rs. | | | |
| T | 7 | 17,342 | 741 | 18,083 | 20,823 | 14,422 | 1379 | 18,801 | | | |
| I | *2 | 4004 | 125 | 4129 | 4467 | 2591 | 63 | 2654 | | | |
| II | 31 | 26,075 | 1355 | 27,430 | 33,602 | 23,188 | 653 | 23,841 | | | |
| III | 18 | 9139 | 649 | 9788 | 11,850 | 10,909 | 160 | 11,069 | | | |
| IV | 49 | 11,858 | 1054 | 12,012 | 13,867 | 12,612 | 98 | 12,710 | | | |

| V | 22 | 2270 | 521 | 2791 | 2550 | 2104 | | 2104 |
|-------|-----|--------|------|--------|--------|--------|------|--------|
| Total | 129 | 70,688 | 4445 | 75,133 | 87,159 | 65,826 | 2363 | 68,179 |

^{*}Of these one lapsed in 1844-45 and the other in 1848-49. Rev. Reo. 172 of 1863,109.

Khed Settlement, 1852-53—continued.

| | | | | | SURVEY. | | | | | |
|--------|-------------------------|--------|--------|------|----------|--------|--------------------------------|--------|--------------------------------|----------------|
| CLASS. | Dry-Crop and Garden. | | Rice. | | Total. | | Dali and Grass Lands. | Total. | High Dr cro Ac Rat | y- op re |
| | Acres. | Rs. | Acres. | Rs. | Acres | Rs. | Rs. | Rs. | Rs. | а |
| т | 21,883 | 16,944 | 1 | 1 | 21,884 | 16,945 | 932 | 17,877 | 4 | 10 |
| 1 | 5277 | 3411 | | | 5277 | 3411 | 163 | 3574 | 1 | 10 |
| II | 43,197 | 27,105 | 135 | 199 | 43,332 | 27,304 | 1244 | 28,548 | 1 | 8 |
| III | 24,179 | 11,592 | 599 | 893 | 24,778 | 12,485 | 609 | 13,094 | 1 | 6 |
| IV | 48,402 | 16,186 | 2549 | 4283 | 50,951 | 20,469 | 1496 | 21,965 | 1 | 4 |
| V | 12,745 | 2206 | 1142 | 1822 | 13,887 | 4028 | 635 | 4663 | 1 | 0 |
| Total | 1,55,683 | 77,444 | 4426 | 7198 | 1,60,109 | 84,642 | 5079 | 89,721 | | |

1853-54.

1853-54 was an unusually bad season. The south-west monsoon began with excessive rain followed by drought, relieved in some place by a few showers. Large sums had to be remitted. At Indapur the rupee price of Indian millet or *jvari* was the same as in the last year, about 112 pounds (56 *shers*). Over the whole district the tillage area rose from 1,316,767 to 1,368,430 acres and the collections fell from £80,072 (Rs. 8,00,720) to £72,476 (Rs. 7,24,760); £8294 (Rs. 82,940) or 10.2 per cent were remitted and £250 (Rs. 2500) left outstanding. [Bom. Gov. Rev. Rec. 17 of 1858, 10, 167, 200, 238. The details are:

Poona Tillage and Revenue, 1852-1854.

| CLID | | | 1852-53 | | |
|-------------------|-----------|-----------|-------------|--------------------|--------------|
| SUB- Division. | Villages. | Tillage. | Remissions. | Out- standings. | Collections. |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | | 14 | 92 | 1,31,685 |
| Indapur | 99 | 1 | 134 | - | 1,10,179 |
| Khed | 1871/2 | 1 | 4257 | 1 | 96,379 |
| Pabal | 58 | 1 | | - | 99,824 |
| Purandhar | 771/2 | | 996 | 1 | 1,06,664 |
| Bhimthadi | 73 | | 1601 | 18 | 84,350 |
| Haveli | 89 | | 276 | 341 | 99,308 |
| Maval | 182 | | | | 72,332 |
| Total | 942 | 1,316,767 | 7278 | 452 | 8,00,721 |

continued..

| CLID | | | 1853-54 | ŀ. | |
|-------------------|-----------|----------|-------------|--------------------|--------------|
| SUB- Division. | Villages. | Tillage. | Remissions, | Out. standings. | Collections. |
| | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | | 9639 | 3 | 1,18,764 |
| Indapur | 99 | | 11,553 | 3 | 1,01,619 |
| Khed | 187½ | | 14,096 | - | 87,314 |
| Pabal | 58 | | 489 | | 99,519 |
| Purandhar | 771/2 | | 836 | | 1,00,938 |
| Bhimthadi | 73 | | 5875 | 320 | 86,707 |
| Haveli | 90 | | 10,772 | 2046 | 87,269 |

| Maval | 180 | | 23,662 | 126 | 42,632 |
|-------|-----|----------|--------|------|----------|
| Total | 941 | 136,8430 | 82,942 | 2498 | 7,24,762 |

SURVEY. Maval 1853-54.

In 1853-54 the survey settlement was introduced into the 180 Government villages of the Maval sub-division in the south-west, corner of the district. [Capt. Francis, Surv. Supt. 33 of 31st January 1854; Bom. Gev. SeL LXX.] Maval was bounded on the west by Thana, on the north by Khed, on the east by Haveli, and on the south by Bhor. The sub-division 'contained a main group of 102 villages called Maval, and to the south of the main group a minor group of 78 villages called Mulshi. In general features Maval was like the Sahyadri subdivisions which had been Settled before. Except the range which was strengthened by the forts of Lohogad and Visapur the Maval hill ranges were not so large as those further north, and, except in the western Mulshi villages, the valleys were more open, broader, and leveller. Close to the Sahyadris the rainfall was very much heavier than in any other part of the sub-division. The chief products of the dry-crop or jirayat lands were nachni, sava, and til for the early harvest, and wheat and gram for the late harvest Small areas of bajri and jvari were grown in a few of the eastern villages. The black soil lands were suited only for late crops. Rice was the crop from which the landholders paid their revenue. Most of the rice went to Poona, a little went below the Sahyadris, and a still smaller share was kept for local retail sale at Varangaon Khandala, and other chief halting places along the Bombay-Poona road. The only manure was wood and grass ashes with which the rice nursery beds were covered. Mr. Pringle's settlement of the Maval villages had been a success. During the twenty-three years it had been in force not more than five per cent of remissions had been required. In the ten years ending 1852 the spread of tillage had been steady, and in 1852 it was rapid.

[The survey diagram for 178 Maval villages gives the following details for the twenty-three years since Mr. Pringle's settlement in 1830-31:

Maval Tillage and Revenue, 1830 - 1853.

| VEAD | DRY-CROP. | | | | RICE. | | TOTAL. | | |
|-------|------------------------------|--|----------|--------|---------|----------|--------|----------|--|
| YEAR. | Tillage. Remis- Collections. | | Tillage. | Remis- | Collec- | Tillage. | Remis- | Collect- | |

| | | sions. | | | sions. | tions. | | sions. | ions. |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Acres. | Rs. | Rs. | Acres. | Rs. | Rs. | Acres. | Rs. | Rs. |
| 1830- 31 | 25,000 | 2000 | 16,500 | 11,000 | 3000 | 31,000 | 36,000 | 5000 | 47,500 |
| 1831- 32 | 21,000 | 500 | 15,000 | 10,000 | 500 | 31,000 | 31,000 | 1000 | 46,000 |
| 1832- 33 | 21,000 | 3000 | 11,000 | 10,000 | 5500 | 27,000 | 31,000 | 8500 | 38,000 |
| 1833- 34 | 21,000 | 200 | 14,500 | 10,500 | 200 | 33,000 | 31,500 | 400 | 47,500 |
| 1834- 35 | 23,000 | 200 | 15,000 | 10,500 | 200 | 33,000 | 33,500 | 400 | 48,000 |
| 1835- 36 | 26,000 | 200 | 17,500 | 10,500 | 500 | 33,000 | 36,500 | 700 | 50,500 |
| 1836- 37 | 25,500 | 3000 | 14,500 | 10,500 | 4000 | 28,500 | 36,000 | 7000 | 43,000 |
| 1837- 38 | 24,500 | 3000 | 14,000 | 10,500 | 3500 | 29,000 | 35,000 | 6500 | 43,000 |
| 1838- 39 | 24,000 | 3500 | 13,000 | 11,000 | 4000 | 29,500 | 35,000 | 7500 | 42,500 |
| 1839- 40 | 24.500 | 3000 | 13,000 | 11,000 | 4000 | 31,000 | 35,500 | 7000 | 44,000 |
| 1840- 41 | 24,000 | 1000 | 15,000 | 11,000 | 1500 | 32,500 | 35,000 | 2500 | 44,500 |
| 1841- 42 | 23,000 | 2000 | 13,000 | 11,000 | 2500 | 31,500 | 34,000 | 4500 | 44,500 |
| 1842- 43 | 23,500 | 500 | 15,000 | 11,500 | 1000 | 34,000 | 35,000 | 1500 | 49,000 |
| 1843- 44 | 22,000 | 800 | 14,000 | 11,000 | 700 | 33,500 | 33,000 | 1500 | 47,500 |
| 1844- 45 | 22,500 | 200 | 14,200 | 11,000 | 200 | 34,000 | 33,500 | 400 | 48,200 |
| 1845- 46 | 23,500 | 500 | 14,500 | 11,500 | 500 | 34,500 | 35,000 | 1000 | 49,000 |

| 1846- 47 | 24,000 | 200 | 15,000 | 11,500 | 500 | 34,500 | 35,500 | 700 | 49,500 |
|-------------|--------|-----|--------|--------|-----|--------|--------|-----|--------|
| 1847- 48 | 25,000 | 300 | 15,500 | 11,700 | 300 | 35,500 | 36,700 | 600 | 51,000 |
| 1848- 49 | 24,400 | 300 | 15,500 | 11,800 | 300 | 35,500 | 36,200 | 600 | 51,000 |
| 1849- 50 | 25,500 | 200 | 16,500 | 11,000 | 300 | 35,500 | 36,500 | 500 | 52,000 |
| 1850- 51 | 27,000 | 300 | 17,500 | 11,800 | 500 | 36,000 | 38,800 | 800 | 53,500 |
| 1851- 52 | 28,000 | 200 | 21,000 | 11,500 | 200 | 36,200 | 39,500 | 400 | 57,200 |
| 1852- 53 | 33,400 | 100 | 22,000 | 11,800 | 100 | 36,300 | 45,200 | 200 | 58,300 |

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As in several other parts of the Presidency, where light rates were in force, the light assessment had brought with it a plague of Marwari Vanis, keen calculators, who did not make advances to the people unless they knew that they could make money out of the land if it was thrown on their hands. The villages along the Bombay road were filled with Marwaris who had managed to get the great body of the people deep in their books. The people were more oppressed with debt in that part of the mamlatdars division than in any other sub-division of the collectorate. A Marwari or a Marwari's agent generally lurked about the landholder's stackyard when any thrashing was going on, ready to step in and carry off the bulk of the produce. Some change in the relations between the landholders and the moneylenders was urgently wanted. In the Mulshi group though the rates were higher, there were no Marwaris and the people were much better off. [Captain Francis, 31st] January 1854, Bom. Gov Sel. LXX. 6-7.] Government did not agree with Captain Francis in explaining the impoverished state of the Maval landholders by the excessive exactions of moneylending Marwaris. [Govt. Letter 3588 of 28th Augt. 1855, Bom. Gov. Sel. LXX. 64-65.] In the west the rainfall was too heavy for dry-crops; the best dry-crops were grown in the eastern villages. Captain Francis proposed four classes of dry-crop land. The first class with an acre Tate of 3s. (Rs. 1½) included the villages in the extreme, east of the Maval group touching on Khed; [Capt. Francis afterwards (246, 10th July 1854) did away this first class by lowering the rate to 2g. 9d. (Rs. 1?). Bom.

Gov. Sel LXX. 55-56.] the second class rate of 2s. 9d. (Rs. 1?) was applied to the group of villages lying immediately west of the first class villages; the third class rate of 2s. 6d. (Rs.1¼) was applied to a group west of the second class villages; and the fourth class rate of 2s. (Re. 1) was applied to the villages lying along the crest of the Sahyadris and on the sides of the hills. The villages along and at a short distance from the Bombay-Poona road made considerable profits from their uplands or mals by spiling grass to the numerous cart and pack bullocks that were daily halting at the different stages on the road. For this reason Khandala and some other villages near the Sahyadris were brought into the third instead of the fourth class.

As abundant rainfall is one of the most important elements in successful rice growing, it might be supposed that rice lands would be valuable in proportion to their nearness to the Sahyadris. Local inquiry showed that this was not the case. The best rice lands were not in the Sahyadri villages, nor were the least productive rice lands in the most easterly villages. Both in the main Maval group and in the smaller Mulshi group the best rice lands were near the middle of the tract. [Bom. Gov. Sel. LXX. 5.] In classing the rice lands, with Captain Wingate's approval, Captain Francis adopted the system introduced by Mr. Fraser Tytler into the Nasik and Ahmadnagar hilly rice lands. The chief change introduced was in basing the valuation on the kind of rice grown and not on the character of the embankment. [Bom. Gov. Sel. LXX. 3; Nasik Statistical Account, XVI. 233-234.] Under these principles the rice lands were arranged under four classes with acre rates of 9s. 8s. 1s. and 6s. (Rs. 4½, Rs. 4, Rs. 3½, and Rs. 3). In distributing these rates the rate of 9s. (Rs. 4½) was applied to some villages of the Mulshi group whose dry-crop lands belonged to the first and second classes. The rates of 8s. and 7s. (Rs. 4 and Rs. 3 1/2) were applied to the Mulshi villages whose dry-crop lands brought them into the third and fourth classes and to all villages of the main Maval group whose dry-crop lands brought them into the first second and third classes. The rate of 6s. (Rs. 3) was applied to all the fourth class drycrop villages in the main Maval group.

Compared with the twenty-three years ending 1852-53 the survey rental of the land held for tillage at the time of the survey showed a rise from £4832 (Rs. 48,320) to £5289 (Rs. 52,890); compared with the ten years ending 1852-53 it showed a rise from £5191 (Rs. 51,910) to £5289 (Rs. 52,890); and compared with the year 1852-53 it showed a fall from £5823 (Rs. 58,230) to £5289 (Rs. 52,890). [These figures are for 178 out of the 180 villages of this survey group. Including two villages which came into British possession in 1848, the

survey rental when compared with the previous year shows a reduction from Rs. 59,358 to Rs. 53,947. Bom. Gov. Sel. LXX. 9.] The survey rental on the entire arable land amounted to £7056 (Rs. 70,560). There was therefore a considerable margin of waste from the cultivation of which the survey reduction might be made good. The following statement gives the details of this settlement:

Maval Settlement, 1853-54.

| DIVISION. | Vil- | Class | DRY-0 | CROP. | RIO | CE. | TOT | ΓAL. | Grazing | |
|-------------------|--------|--------|--------|---------|--------|---------|--------|---------|----------------------|--------|
| DIVISION. | lages. | Class. | Area. | Rental. | Area. | Rental. | Area. | Rental. | and <i>Dali</i> . | Total |
| | | | Acres. | Rs. | Acres. | Rs. | Acres. | Rs. | Rs. | Rs. |
| | 9 | I | 11,151 | 4658 | 1134 | 2176 | 12,285 | 6834 | 325 | 7159 |
| Mamlatdar's | 51 | II | 27,298 | 14,999 | 4163 | 9232 | 31,461 | 24,231 | 1312 | 25,543 |
| division | 24 | III | 9824 | 3757 | 2187 | 5342 | 12,011 | 9099 | 720 | 9819 |
| | 16 | IV | 5959 | 1220 | 1178 | 2912 | 7137 | 4132 | 766 | 4898 |
| | 4 | I | 3946 | 1848 | 755 | 2130 | 4701 | 3978 | 268 | 4246 |
| Mulshi | 13 | II | 4286 | 1735 | 1695 | 4687 | 5981 | 6422 | 835 | 6767 |
| petty division | 29 | III | 3506 | 1187 | 2638 | 8804 | 6144 | 9991 | 667 | 10,658 |
| | 32 | IV | 10,836 | 1927 | 1552 | 3950 | 12,388 | 6877 | 899 | 6776 |
| Total | 178 | | 76,806 | 31,331 | 15,302 | 39,233 | 92,108 | 70,564 | 5292 | 75,856 |

The effect of lowering the first class dry-crop rates from 3s. (Rs. 1½) to 2s. 9d. (Rs. 1?) which has been noticed above, was to reduce these totals by £39 (Rs. 390) in the main Maval group and by £15 (Rs. 150) in the Mulshi group. [Survey Superintendent, 33 of 31st January 1854 and 246 of 10th July 1854; Rev. Comr. 2542 of 14th Augt. 1854 and 576 of 23rd February 1855; Gov. Letter 3588 of 28th Augt. 1855. Bom. Gov. Sel. LXX. 1-66.]

1854-1866.

The eighteen years ending 1854 was a period of little improvement. In Indapur and Bhimthadi the people were few and poor. Over almost the whole of the district about half of the eighteen years, 1838,1840, 1841,1844,1845,1850,1851, and 1853, were bad seasons; and except

when its price was raised by a general failure of crops grain was ruinously cheap, the rupee price of Indian millet varying from 30 to 144 and averaging 104 pounds. [Bom. Gov. Sel, CVII. 71.] In spite of these obstacles the tillage area rose from 895,438 acres in 882 villages in 1839-40 to 1,368,430 acres in 941 villages in 1853-54, and the collections from £63,612 (Rs. 6,36,120) in 1837-38 to £72,476 (Rs. 7,24,760) in 1853-54. The turning point was passed about 1852 and there was a marked and steady improvement in the next twelve years 1854-1866. Towards, the close of this period, owing to the continuation of the American war and several years of short crops, produce prices were higher than they had been since the beginning of British rule, Jvari sold at Indapur at about 26 to 36 pounds (13-18 shers) the rupee in 1862-1866 in place of about 48 pounds (24 shers) in 1818 88 pounds (44 shers) in 1826, 96 pounds (48 shers) in 1835, and112 pounds (56 shers) in 1854. During the twelve years ending 1866 the tillage area rose from 1,368,430 acres in 941 villages in 1853-54 to 1,743,179 in 988 villages in 1865-66; and collections from £72,476 to £105,521 (Rs.7,24,760 - Rs. 10,55,210). In Indapur, which before 1846 was one of the most distressed subdivisions, collections showed arise from £6522 (Rs.65,220) between 1836 and 1846 to £8305 (Rs. 83,050) between 1856 and 1866 or an increase of 27 per cent, the average remissions were reduced from £1222 (Rs. 12,220) to 12s. (Rs. 6), and during the ten years ending 1865-66 there was hardly any waste. The yearly details are:

1854-55.

In 1854-55 in the plain or *desh* part of the collectorate much distress was caused by the late setting in of the rains. In the rice-growing tracts along the Sahyadris, where failure of rain would have caused serious distress, the usual showers fell during the whole of June and July; on the whole 1854 was a favourable season. In December some damage had been done to the crops by hailstorms in parts of Junnar and Purandhar. At the beginning of the season many cattle died of starvation in consequence of the scarcity of fodder. In August 1854 the Revenue Commissioner sanctioned the grant of advances to landholders, and they were enabled to renew their stock of cattle and to keep up their cultivation which must otherwise have fallen. Of £1385 (Rs. 13,850) the total sum advanced, £1143 (Rs. 11,430) were for cattle and £242 (Rs. 2420) were for water works. At Indapur the rupee price of Indian millet or *ivari* rose from about 112 to 58 pounds (56-29 shers). Over the whole district the tillage area rose from 1,368,430 to 1,395,080 acres, and the collections from £72,476 to £81,486 (Rs. 7,24,760-Rs. 8,14,860); £612 (Rs. 6120) or 074 per

cent were remitted and £24 (Rs. 240) left outstanding. [Gov. Rev. Rec. 17 of 1859, 1325, 1367, 1432, 1433, 1459, 1461,1484, 1522, 1527. The details are:

Poona Tillage and Revenue, 1853-1855.

| | | 18 | 53-54. | | | | 18 | 54-55. | | |
|-------------------|-----------|-----------|------------------|-------------------------|-------------------|-----------|-----------|------------------|-------------------------|---|
| SUB- DIVISION. | Villages. | Tillage. | Remis- sions. | Out- stand- ings. | Collec- tions. | Villages. | Tillage. | Remis- sions. | Out- stand- ings. | (|
| | | Acres. | Rs. | Rs. | Rs. | Re. | Acres. | Rs. | Rs. | |
| Shivner | 176 | 205,147 | 9659 | 3 | 1,18,764 | 176 | 200,851 | 1246 | | 1 |
| Indapur | 99 | 295,081 | 11,553 | 3 | 1,01,619 | 99 | 297,106 | 11 | 66 | 1 |
| Khed | 1871/2 | 164,852 | 14,096 | | 87,314 | 1871/2 | 157,931 | 212 | | |
| Pabal | 58 | 153,579 | 489 | | 99,519 | 59 | 158,795 | 14 | | 1 |
| Purandhar | 771/2 | 217,924 | 6836 | | 1,00,938 | 801/2 | 223,748 | 265 | | 1 |
| Bhimthadi | 73 | 167,773 | 5875 | 320 | 86,707 | 74 | 180,345 | 2469 | | |
| Haveli | 90 | 108,206 | 10,772 | 2046 | 87,269 | 90 | 113,849 | 121 | 178 | |
| Maval | 180 | 55,868 | 23,662 | 126 | 42,632 | 181 | 62,455 | 1785 | | |
| Total | 941 | 1,368,430 | 82,942 | 2498 | 7,24,762 | 947 | 1,395,080 | 6123 | 244 | 8 |

Of 1,395,080 acres the total area under tillage, 439,125 acres or 31.5 per cent were under *jvari*, 447,153 or 32 per cent under *bajri*, 74,503 or 53 per cent under wheat, 64,031 or 4.5 per cent under gram, 60,167 or 4 3 per cent under *math*, 37,941 or 2.7 per cent under *kardai*, 18,606 or 1.3 per cent under sugarcane, 14,488 or 1 per cent under rice, 1597 under *udid*, 4123 under cotton, 229 under hemp, 166 under linseed, and 232,951 or 16.7 per cent under miscellaneous crops.]

1865-56.

In 1855-56 twenty-three villages lapsed and raised the number of Government villages from 947 to 970 and reduced the number of alienated villages from 247 to 224. Rain began in the month of June and continued to fall seasonably until the middle of July. After this

none fell in Indapur and Bhimthadi until the end of August, and the other sub-divisions had little or no rain till about the middle of September. A favourable change took place after the 20th of September. There were several heavy falls of rain through nearly every part of the collectorate, and the crops which had not suffered beyond recovery revived. On the whole the season of 1855 was fair. At Indapur the rupee price of Indian millet or *jvari* fell from about 58 to 64 pounds (29-32 *shers*). Over the whole district the tillage area rose from 1,395,080 acres in 947 villages to 1,447,006 acres in 970 villages, and the collections from £81,486 to £85,429 (Rs.8,14,860-Rs.8,54,290); £1032 (Rs.40,320) or 1 19 per cent were remitted, and £41 (Rs. 410) left outstanding. [Bom. Gov. Rev. Rec. 15 of 1860, 4-6, 29, 32, 56. The details are:

Poona Tillage and Revenue, 1854-1856.

| | | 18 | 51-55. | | | | 18 | 55-66. | | |
|-------------------|-----------|-----------|------------------|-------------------------|-------------------|-----------|-----------|------------------|-------------------------|-------------------|
| SUB- DIVISION. | Villages. | Tillage. | Remis- sions. | Out- stand- ings. | Collec- tions. | Villages. | Tillage. | Remis- sions- | Out- stand- ings. | Collec- tions. |
| | | Acres. | Rs. | Rs. | Rs. | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 176 | 200,851 | 1246 | | 1,27,324 | 177 | 202,717 | 231 | | 1,30,468 |
| Indapur | 99 | 297,106 | 11 | 66 | 1,13,566 | 99 | 301,890 | 27 | | 1,15,094 |
| Khed | 1871/2 | 157,931 | 212 | | 99,813 | 190½ | 157,554 | 859 | | 1,00,118 |
| Pabal | 59 | 158,795 | 14 | 1 | 1,03,847 | 59 | 161,999 | | | 1,05,980 |
| Purandhar | 801/2 | 223,748 | 265 | 1 | 1,08,826 | 981/2 | 248,174 | 3460 | | 1,32,724 |
| Bhimthadi | 74 | 180,345 | 2469 | 1 | 94,927 | 74 | 198,000 | 2641 | 413 | 1,02,185 |
| Haveli | 90 | 118,849 | 121 | 178 | 99,857 | 91 | 114,135 | 1231 | | 99,235 |
| Maval | 181 | 62,455 | 1785 | | 66,708 | 181 | 63,087 | 1871 | | 68,538 |
| Total | 947 | 1,396,080 | 6123 | 244 | 8,14,863 | 970 | 1,447,006 | 10,320 | 413 | 8,54,292 |

Of the total area under tillage 86 per cent were under jvari and 27 under bajri.

1856-57.

In 1856 general but slight rain fell early in June. From the end of June till late in July the fall was very slight and partial. During early August rain fell seasonably everywhere in the collectorate. But for the rest of the season it was partial and scanty. Considerable and general failure resulted in some parts of the district. On the whole the season was below the average. At Indapur the rupee price of Indian millet or *jvari* was the same as in 1855-56 about 64 pounds (32 *shirs*). Over the whole district the tillage area rose from 1,447,006 to 1,534,473 acres and the collections from £85,429 to £87,928 (Rs. 8,54,290-Rs. 8,79,280); £1649 (Rs. 16,490) or 1.8 per cent were remitted and £35 (Rs. 350) left outstanding. [Bom. Gov. Rev. Rce. 15 of 1860, 201, 927, 230, 362. The details are:

Poona Tillage and Revenue, 1855 -1857.

| | | 1 | 855-56 | | | | 18! | 56-57. | | |
|-------------------|----------------|-----------|------------------|-------------------------|-------------------|-----------|------------|------------------|-------------------------|-------------------|
| SUB- DIVISION. | Vil- lages. | Tillage. | Remis- sions. | Out- stand- ings. | Collec- tions. | Villages. | Tillage. | Remis- sions. | Out- stand- ings. | Collec- tions. |
| | | Acres. | Rs. | Rs. | Rs. | | Acres. | Rs. | Rs. | Rs. |
| Shivner | 177 | 202,717 | 231 | | 1,30,468 | 178 | 218,331 | 3159 | 91 | 1,33,069 |
| Indapur | 99 | 301,390 | 27 | | 1,15,094 | 99 | 304,743 | 176 | 5 | 1,16,099 |
| Khad | 190½ | 157,554 | 859 | | 1,00,118 | 190½ | 168,120 | 4316 | 113 | 1,00,880 |
| Pabal | 59 | 161,999 | - | | 1,05,930 | 59 | 168,378 | 1273 | | 1,08,001 |
| Purandhar | 981/2 | 248,174 | 3460 | I | 1,32,724 | 991/2 | 274,513 | 3208 | 113 | 1,35,178 |
| Bhlmthadi | 74 | 198,000 | 2641 | 413 | 1,02,185 | 74 | 217,913 | 2233 | - | 1,10,513 |
| Haveli | 91 | 114,135 | 1231 | I | 99,235 | 81 | 116,889 | 169 | 29 | 1,05,317 |
| Maval | 181 | 63,037 | 1871 | | 68,538 | 182 | 66,586 | 1955 | | 70,225 |
| Total | 970 | 1,447,006 | 10,320 | 413 | 8,54,292 | 973 | 1,534,473. | 16,489 | 351 | 8,79,282 |

Of the total area under tillage 30 per cent were under *jvari* and 331 under *bajri*.]

In October 1857 Mr. Leighton, the first assistant collector who had charge of Khed Haveli and Maval, wrote [Bom. Gov. Rev. Rec. 15 of 1860, 315-320.] that the object of improving the state of the people

by lowering the Government demand had been defeated by the extortionate demands of moneylenders. He thought that a law should be passed to prevent the levy of extortionate interest. He knew the objections which were urged against usury laws in England. He was satisfied that these objections did not apply to the state of affairs in Western Poona. The borrowers were poor ignorant and simple, the lenders were sharp unscrupulous strangers. Mr. Leighton thought that no bond passed by a landholder should be binding unless it was registered in an assistant collector's court; that the rate of interest should be limited by law and that all holders indebted beyond a certain amount should be obliged to give Up their land. These measures would at first be unpopular; in time the people would see that they were for their good. Until indebtedness was checked it was hopeless to attempt to improve the state of the people. Native officers anxious to please said the 'people were much better off since the revised survey had come in. He saw no sign of improvement. All that Government had sacrificed had gone to the Marwari. Moreover now that a light assessment had made land valuable, every year numbers of fields passed from the husbandman to the moneylender whose slave he became.

1857-58.

Except in Indapur and Bhimthadi 1857 was on the whole a favourable season. Though there were considerable failures in various parts of Indapur and Bhimthadi the revenue had been collected without undue stress. At Indapur tne rupee price of Indian millet fell from about 64 to 78 pounds (32-39 *shers*). Over the whole district the tillage area rose from 1,534,473 to 1,566,231 acres and the collections from £87,928 to £91,919 (Rs. 8,79,280-Rs. 9,19,190), £291 (Rs. 2910) or 0-31 per cent were remitted, and £61 (Rs. 610) left outstanding. [Bom. Gov. Rev. Rec. 17 of 1851, 5, 37, 40, 68. The details are:

Poona Tillage and Revenue, 1856-1858.

| SUB- | | 1856-57. | | | | | | | |
|-----------|-----------|----------|------------------|--------------------|--------------|--|--|--|--|
| DIVISION. | Villages. | Tillage. | Re- missions. | Out- standings. | Collections. | | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | | |
| Shivner | 178 | 218,331 | 3169 | 91 | 1,33,069 | | | | |

| Indapur | 99 | 304,743 | 176 | 5 | 1,16,099 |
|-----------|-------|-----------|--------|-----|----------|
| Khed | 190½ | 168,120 | 4316 | 113 | 1,00,880 |
| Pabal | 59 | 168,378 | 1273 | | 1,08,001 |
| Purandhar | 991/2 | 274,513 | 3208 | 113 | 1,35,178 |
| Bhimthadi | 74 | 217,913 | 2233 | | 1,10,513 |
| Haveli | 91 | 115,889 | 169 | 29 | 1,05,317 |
| Maval | 182 | 66,586 | 1955 | | 70,225 |
| Total | 973 | 1,534,473 | 16,489 | 351 | 8,79,282 |

continued..

| SUB- DIVISION. | 1857-58. | | | | | | | |
|-------------------|-----------|------------------------------------|------|--------------------|-------------|--|--|--|
| | Villages. | Villages. Tillage. Remissions. sta | | Out- standings. | Collections | | | |
| | | Acres. | Rs. | Rs. | Rs. | | | |
| Shivner | 178 | 224,697 | | | 1,37,719 | | | |
| Indapur | 99 | 305,100 | 20 | | 1,16,256 | | | |
| Khed | 194½ | 178,926 | 567 | | 1,10,279 | | | |
| Pabal | 59 | 167,898 | | 1 | 1,09,693 | | | |
| Purandhar | 1001/2 | 282,833 | 20 | 1 | 1,37,633 | | | |
| Bhimthadi | 74 | 217,687 | 26 | 1 | 1,15,438 | | | |
| Haveli | 92 | 117,493 | | 600 | 1,16,848 | | | |
| Maval | 184 | 71,597 | 2274 | 7 | 75,325 | | | |
| Total | 981 | 1,566,231 | 2907 | 607 | 9,19,191 | | | |

Of the whole area under tillage 36 per cent were under *jvari* and 29 per cent under *bajri*.]

1858-59.

The season of 1858 was on the whole favourable. Rain began early in June, visiting the districts generally but slightly. It afterwards fell

seasonably up to mid-July. From the middle to the end of July there was abundant rain throughout the collectorate, except in Indapur, Supa, and a few Tillages of Pabal and Bhimthadi. Daring August the fall was partial but after August the supply was general and satisfactory. At Indapur the rupce price of Indian millet or *jvari* rose from about 78 to 64 pounds (39-82 *shers*). Over the whole district tillage rose from 1,566,231 to 1,598,885 acres and collections from £91,919 to £93,305 (Rs. 9,19,190-Rs. 9,33,050), £243 (Rs. 2430) or 0-25 per cent were remitted, and £9 (Rs. 90) left outstanding. [Bom. Gov. Rev, Reo. 17 of 1861, 174, 210, 214, 242. The details are of the whole area under tillage 27.4 per cent were under *javari* and 36 per cent under *bajri*:

Poona Tillage and Revenue, 1857-1859.

| SUB- DIVISION. | 1857-58. | | | | | | |
|-------------------|-----------|-----------------------------------|------|--------------------|--------------|--|--|
| | Villages. | VIII 2000 I I III 200 RAMICCIONCI | | Out- standings. | Collections. | | |
| | | Acres. | Rs. | Rs. | Rs. | | |
| Shivner | 178 | 224,697 | | | 1,37,719 | | |
| Indapur | 99 | 305,100 | 20 | | 1,16,256 | | |
| Khed | 194½ | 178.926 | 567 | - | 1,10,279 | | |
| Pabal | 59 | 167,898 | | | 1,09,693 | | |
| Purandhar | 1001/2 | 282,833 | 20 | | 1,37,633 | | |
| Bhimthadi | 74 | 217,687 | 26 | - | 1,15,438 | | |
| Haveli | 92 | 117,493 | | 600 | 1,16,848 | | |
| Maval | 184 | 71,597 | 2274 | 7 | 75,325 | | |
| Total | 981 | 1,566,231 | 2907 | 607 | 9,19,191 | | |

continued...

| SUB- DIVISION. | 1858-59. | | | | | |
|-------------------|----------|----------|-------------|------|--------------|--|
| | Villages | Tillage. | Remissions. | Out- | Collections. | |

| | | | | standings. | |
|-----------|--------|-----------|------|------------|----------|
| | | Acres. | Rs. | Rs, | Rs. |
| Shivner | 178 | 228,481 | | | 1,39,010 |
| Indapur | 99 | 306,008 | | | 1,16,458 |
| Khed | 194½ | 186,433 | 330 | | 1,12,869 |
| Pabal | 69 | 173,224 | | | 1,11,710 |
| Purandhar | 1021/2 | 289,022 | 284 | | 1,40,466 |
| Bhimthadi | 74 | 220,806 | 37 | 3 | 1,16,866 |
| Haveli | 92 | 120,536 | 181 | 8 | 1,21,056 |
| Maval | 183 | 74,375 | 1595 | 90 | 74,611 |
| Total | 982 | 1,598,885 | 2427 | 93 | 9,33,046 |

Of the whole area under tillage 27.4 per cent were under *jvari* and 36 per cent under *bajri*.]

1859-60.

The season of 1859 was an average but an unhealthy season. Tillage rose from 1,598,885 to 1,654,399 acres and collections from £93,305 to £95,663 (Rs. 9,33,050 - Rs. 9,56,630), £36 (Rs. 360) were remitted, and £1 (Rs. 10) left outstanding. [Bom. Rev. Rec. 13 of 1862-64, 103, 152, 176,265, 273, 308.] At Indapur the rupee price of Indian millet fell from about 64 to 78 pounds (32-39 shers). In the opinion of the Deccan Riots Commissioners Deccan Riots Commissioner's Report, 1875 para 51 page 35. not with standing the pressure of debt and the hardships which the laws inflicted on borrowers, about 1860 the landholders of Poona were better off than they had been for years. The conditions of agriculture had been favourable. For nearly twenty years most of the district had enjoyed a fixed and moderate assessment, large tracts of waste had been brought under tillage, ordinary communications and means of transport were improved, and the railway had been brought within easy reach. The construction of the railway had poured into the district a sum of not less than £200,000 (20 lakhs of rupees) in wages of transport and labour. Above all a series of fair seasons had richly rewarded the husbandman's labours. Although the lender might have recourse to the civil court, there was a possibility of the borrower being able to borrow from another lender in order to pay him and the

court would give time; if a decree passed against the landholder his stock and field tools were safe, and his land was not in real danger. He might be imprisoned until he signed a new bond, but he was not likely to be pauperised.

1860-61.

In 1860-61 the rainfall was partial but timely, and the season was on the whole favourable. [Rev. Comer. S.D.42 of 9th January 1861, Bom. Gov. Rev. Rec. 90 of 1861, 177.] Tillage rose from 1,654,399 to 1,664,802 acres and collections from £95,663 to £96,618 (Rs. 9,56,630 to Rs. 9,66,180), £24 (Rs. 240) were remitted, and £5 (Rs. 50) left outstanding. At Indapur the rupee price of Indian millet rose from about 78 to 66 pounds (39-33 shers).

1861-61.

In 1861-62 the rainfall was 23 inches at Indapur, 47 at Poona, 35 at Junnar, and 12 at Khadkala. [Indapur is 90 miles from the crest of the Sahyadris, Poona 32, Junnar 12, and Khadkala in Maval 11.] The season was favourable and healthy. [Rev. Comr. 247 of 1st February 1862, Bom. Gov. Rev. Rec. 235 of 1862-64, 199.] Tillage rose from 1,664,802 to 1,691,352 acres and collections from £96,618 to £99,933 (Rs. 9,66,180-Rs. 9,99,380), 8s. (Rs. 4) were remitted, and £330 (Rs. 3300) left outstanding. At Indapur the rupee price of Indian millet rose from about 66 to 54 pounds (33-27 shers).

1862-63.

In 1862-63 a scarcity of rain caused much damage to the early harvest; but an abundant fall in September and October gave a rich late crop. The rainfall was 12 inches at Indapur, 27 at Poona, 10 at Junnar, and 63 at Khadkala. Public health was good. [Rev. Comr. 598 of 18th March 1863, Bom. Gov. Rev. Rec. 235 of 1862-64, 223.] Tillage rose from 1,691,352 to 1,696,097 acres, collections fell from £99,933 to £99,699 (Rs. 9,99,330 - Rs. 9,96,990), £42 (Rs. 420) were remitted, and £42 (Rs. 420) left outstanding. At Indapur the rupee price of Indian millet rose from about 54 to 32 pounds (27-16 shers).

1863-64.

In 1863-64 a scanty early fall was, except in Indapur and Bhimthadi, followed by a satisfactory late supply. So serious was the failure of rain in Indapur and Bhimthadi, that relief works had to be opened. The

rainfall was 3 inches at Indapur, 23 at Poona, 17 at Junnar, and 95 at Khadkala. Cholera was prevalent particularly in the city of Poona in November after the Alandi fair. [Rev. Comr. S. D. 475 of 6th February 1864, Rev. Rec. 235 of 1862-64, 247.] Tillage rose from 1,696,097 to 1,720,335 acres, collections fell from £99,699 to £98,879 (Rs. 9,96,990 -Rs. 9,88,790), £147 (Rs. 1470) were remitted, and £3438 (Rs. 34,380) left outstanding. At Indapur the rupee price of Indian millet rose from about 32 to 26 pounds (16-13 *shers*).

1864-65.

In 1864-65 the rainfall was 10 inches at Indapur, 17 at Poona, 15 at Junnar, and 50 at Khadkala. The season was on the whole unfavourable though better than the year before, and public health was good. [The Collector, 3027 of 10th December 1864.] Tillage rose from 1,720,335 to 1,736,582 acres and collections from £98,879 to £100,641 (Rs. 9,88,790-Rs. 10,06,410), £23 (Rs. 230) were remitted, and £1536 (Rs. 15,360) left outstanding. At Indapur the rupee price of Indian millet fell from about 26 to 32 pounds (13-16 shers).

1865-66.

In 1865-66 the rainfall though not seasonable, was sufficient, and the early crops were good except in parts of the east. The late harvest was also good except in a few villages of Purandhar, Bhimthadi, and Indapur. On the whole the season was more favourable than any of the three previous years. The rainfall was 6 inches at Indapur, 31 at Poona, 20 at Junnar, and 65 at Khadkala. Public health was good. [Rev. Comr. S. D, 530 of 16th February 1866, Bom. Gov, Rev. Rec. 75 of 1866, 50.] Tillage rose from 1,736,582 to 1,743,179 acres and collections from £100,641 to £105,521 (Rs. 10,06,410-Rs. 10,55,210), £13 (Rs. 130) were remitted, and £1256 (Rs. 12,560) left outstanding. At Indapur the rupee price of Indian millet fell from about 32 to 36 pounds (16-18 shers).

1866-67.

In 1866-67 only in Maval was the rainfall seasonable. In Shivner, Khed, and Haveli, in some parts of Pabal, and in many parts of Purandhar, though the rainfall was short and ill-timed, the crops were not much below the average. In Bhimthadi and Indapur and in the rest of Pabal and Purandhar the rainfall was so short, that both the early and late crops almost entirely failed. The rainfall was 5 inches at Indapur, 1!) at Poona, 24 at Junnar, and 66 at Khadkala. Public health

was on the whole good; and, except in some villages of Khed, cattle were free from disease. [Rev. Comr. S. D. 824 of 5th March 1867.] Tillage rose from 1,743,179 to 1,784,390 acres and collections fell from £105,521 to £93,730 (Rs. 10,55,210 - Rs. 9,37,300), £8004 (Rs. 80,040) were remitted, and £7177 (Rs. 71,770) left outstanding. At Indapur the rupee price of Indian millet fell from about 36 to 46 pounds (18-23 shers). In 1866-67 relief works were opened and more than 108,000 poor landholders and labourers were employed in Indapur, Bhimthadi, and Sirur. Up to the 10th of November 1867 £1876 (Rs. 18,760) were expended on relief works. [INDAPUR, 32] miles executed, 69 remained to be executed on 10th November 1867, amount expended Rs. 8340. BHIMTHADI, 21 miles executed, 13 remained, amount spent Rs. 9420. SIRUR, 184 miles executed, and amount spent Rs. 970. Cost of tools and plant Rs. 30, Total Rs. 18,760. Considerable remissions were also granted. The help given by Government by grants, remissions, and postponements, was of the greatest service to the people, enabling them to tide over their difficulties and start afresh. Mr. Oliphant, Collector, 3990 of 12th December 1867.]

REVISION SURVEY, 1867-1884.

In 1867 the thirty years' leases of the original survey settlement began to fall in and arrangements were made for a revision survey. The revision survey was begun in Indapur in 1867. Since then, except during the 1876 and 1877 famine when survey operations were at a stand, the revision has been gradually extended as the leases fell in. Now (1st July 1884) all, except 162 Haveli villages and the Khed and Maval sub-divisions, is completed. The result of the revision has been an increase in the assessment from £61,161 to £81,683 (Rs. 6,11,610-Rs. 8,16,830) or 34 per cent. The details are:

Poona Revision Settlement, 1867-1884.

| YEAR. | Group. | Villages. | Survey Settlement. | | | | | |
|-------------|---------|-----------|--------------------|----------|------------|----------|-----------|--|
| | | | Former. | Revised. | Increased. | Amended. | Increased | |
| | | | Rs. | Rs. | Per Cent | Rs. | Per Cent | |
| 1866- 67 | Indapur | 78 | 81,184 | 1,24,506 | 53 | 1,11,866 | 38 | |

| 1871- 72 | Bhimthaii | 48 | 74,222 | 1,28,971 | 73 | 1,03,982 | 40 |
|-------------|-----------|-----|----------|----------|----|----------|----|
| 1872- 73 | Pabal | 59 | 1,02,228 | 1,51,511 | 48 | 1,39,479 | 36 |
| 1872- 73 | Haveli | 83 | 80,965 | 1,33,794 | 65 | 1,13,773 | 41 |
| 1873- 74 | Supa | 39 | 57,461 | 81,713 | 42 | 72,303 | 26 |
| 1879- 80 | Purandhar | 17 | 18,733 | 28,617 | 52 | 28,617 | 52 |
| 1879- 80 | Purandhar | I8 | 18,486 | 25,631 | 39 | 25,631 | 39 |
| 1883- 84 | Sirur | 37 | 57,831 | 72,005 | 24 | 72,005 | 24 |
| 1884- 85 | Junnar | 142 | 1,20,500 | 1,49,172 | 23 | 1,49,172 | 23 |
| | Total | 521 | 6,11,610 | 8,95,920 | 46 | 8,16,828 | 34 |

REVISION SURVEY.

Indapur, 1866-67.

An examination of the history of the Indapur villages during the survey lease satisfied Colonel Francis that between the cheapness of grain and the occurrence of bad seasons the original rates continued to 1846 as high as the people could afford to pay. [Bom. Gov. Sel. CVII. 37. During the second period of ten years (1846-1856) the average yearly collections increased but little; at the same time a decline in remissions showed that the landholders were better off than before. During the next or last ten years of the survey lease (1856-1866) the whole subdivision of Indapur may be said to have been regularly under tillage, the highest return of arable waste in any year being only 1176 acres. [In 1866 only 930- acres were under the head of waste. This total included some tracts of assessed grazing or gayran made over to the villagers as free grazing but which, as they bore an assessment, were included in the arable waste Even with this undue increase the arable waste bore the insignificant proportion of one-third per cent to the total arable area of the sub-division. Bom. Gov. Sel. CVII. 38. The revenue returns for this period were perhaps even more satisfactory. Of £83,054 (Rs. 8,30,540) the total revenue demand for these ten years, only £6 (Rs. 60) had to be remitted. [Bom. Gov. Sel. CVII. 21, 39. The details are:

| YEAR. | Settlement. | Remissions. | Outstandings. | Collections. | Increa | ise. |
|------------------|-------------|-------------|---------------|--------------|--------|-----------|
| Former. | Rs. | Rs. | Rs. | Rs. | Rs. | Per Cent. |
| 1826- 1836 | 76,930 | 23,200 | 13,474 | 40,256 | | |
| Survey. | | | | | | |
| 1836-1846 | 77,443 | 12,223 | | 65,220 | 24,964 | 62 |
| 1846-1856 (a) | 77,919 | 865 | | 77,054 | 36,798 | 91 |
| 1856-1866 (b) | 88,054 | 6 | | 83,048 | 42,792 | 106 |
| 1836-1866 | 79,472 | 4365 | | 75,107 | 34,851 | 86 |

(a) & (b) Fire and six per cent respectively should be deducted from the revenues of these periods as a set-off for the Collections from two lapsed villages not included in the ten years' average preceding the settlement. Bom. GOV. Sel. CVII. 39.]

Besides by the moderateness of the assessment, during the survey lease, Indapur had been enriched by the introduction of carts; by the making of roads; and, in 1862, by the opening of the Peninsula railway through its northern villages. Till 1852-53 produce prices continued low or uncertain. In that year Indian millet was selling at about 112 pounds (56 shers) the rupee. By 1855-56 it had risen to about 64 pounds (32 shers). From that it remained pretty steady till 1862-63 when it rose to about 32 pounds (16 shers) and continued at about thirty-two pounds till 1867. [Bom. Gov. Sel. CVII. 49.] The increase of wealth among the Indapur landholders during the survey lease was shown by the sinking of 625 new wells and the repairing of 184 old wells which together might be estimated to represent an outlay of £30,000 (Rs. 3,00,000). Of the 625 new wells 291 were sunk during the six years ending 1866. Bom. Gov. Sel, CVII. 50-51.] During the same time fifty-nine village offices or *chavdis* had been built at a cost of £1342 (Rs. 13,420), and twenty-seven resthouses at a cost of £1284 (Rs. 12,840). Of this whole outlay Government had paid £451 (Rs. 4510) and the people £2175 (Rs. 21,750). At the beginning of the survey lease land had no sale value. At its close, an examination of a number of sales satisfied Colonel Francis that the land was on an average worth seventeen years' purchase that is a total sale value of about £138,000 (Rs. 13,80,000). [Bom. Gov. Sel. CVII. 53. The following sales are quoted by Colonel Francis:

Indapur Land Sales. 1865 -1866.

| VILLAGES. | Sales. | Area Sold. | Assessment. | Price. | Years' Purchase. |
|-----------|--------|------------|-------------|--------|---------------------|
|-----------|--------|------------|-------------|--------|---------------------|

| | | A. | g. | Rs. | a. | Rs. | |
|---------------------|----|------|----|-----|----|--------|----|
| Indapur | 11 | 341 | 2 | 83 | 11 | 1948 | 23 |
| Gagargaon | 1 | 29 | 27 | 4 | 10 | 200 | 42 |
| Pimpri Khurd | 2 | 41 | 21 | 5 | 10 | 175 | 31 |
| Dauz | 5 | 74 | 4 | 22 | 1 | 470 | 21 |
| Ponavri | 1 | 32 | 39 | 12 | 6 | 199 | 16 |
| Udhat | 1 | 11 | 24 | 5 | 13 | 160 | 27 |
| Palasdev | 4 | 108 | 39 | 54 | 11 | 6301/2 | 11 |
| Bigvan | 2 | 23 | 37 | 6 | 10 | 20 | 3 |
| Kalas | 2 | 78 | 31 | 22 | 6 | 150 | 7 |
| Redni | 1 | 30 | 38 | 7 | 12 | 100 | 13 |
| Nirvangi | 1 | 32 | 6 | 12 | 1 | 800 | 66 |
| Bavda | 3 | 74 | 35 | 28 | 8 | 275 | 10 |
| Bhat Nimbgaon | 1 | 8 | 3 | 7 | 14 | 75 | 9 |
| Varkhuta Budrukh | 2 | 69 | 32 | 16 | 7 | 115 | 7 |
| Gopi | 2 | 22 | 4 | 8 | 7 | 550 | 64 |
| Sarati | 1 | 50 | 39 | 28 | 11 | 300 | 10 |
| A'goli | 2 | 35 | 7 | 15 | 15 | 128 | 8 |
| Nimbgaon Ketki | 1 | 26 | 31 | 24 | 11 | 200 | 8 |
| Ajota | 2 | 71 | 31 | 18 | 4 | 300 | 16 |
| Madanvadi | 1 | 25 | 32 | 9 | 11 | 121/2 | 1 |
| Rui | 1 | 21 | 22 | 4 | 1 | 40 | 10 |
| Babulgaon | 1 | 11 | 6 | 4 | 8 | 50 | 11 |
| Total | 48 | 1223 | 30 | 404 | 12 | 6898 | 17 |

Bom. Gov. Sel. CVII. 52. A. stands for acres and g. for *gunthas* 40 of which make an acre.]

During the thirty years of the survey lease population increased from 40,179 to 52830 or 31 per cent, farm bullocks from 17,673 to 20,976 or 19 per cent, carts from 291 to 1165 or 300 per cent, and ploughs from 1454 to 1820 or 25 per cent. [The addition of 19 per cent under bullocks is also small compared with the spread of tillage. The season in which the enumeration was made was very unfavourable in the Kalas petty division of Indapur and many cattle had been sent to other parts to graze. A good many had been sold for want of fodder. Bom. Gov. Sel. CVII. 54.] Cattle other than farm bullocks showed a decrease from 27,002 to 24,565 or 9 per cent. Because of inaccuracies in the former measurements, and still more from changes made afterwards when boundary marks were fixed, it was found necessary to resurvey the whole tract. In order that it might afterwards be of use in the Trigonometrical Survey the traverse system was adopted. [Bom. Gov. Sel. CVII. 57- 62. In twenty survey numbers of two to thirty-five acres the error in Mr. Pringle's measurements was found to vary from one to ninety-four per cent. The details are.

Indapur Survey Measurements. 1826 and 1866.

| | Ar | ea acc | ording | g to | Diffe | rence. | | | Ar | ea acc | ording | g to | Di | fferen | ce. |
|--------------------|------|----------------------|--------|------|-------------|--------|--------------------|----|-----------------------------|--------|--------------------|------|----------|--------|--------------|
| SURVEY NUMBERS. | Prin | Ir. gle's vey. | Pres | | In Area. | 1 01 | SURVEY NUMBERS. | | Mr. Pringle's Survey. | | Present Survey. | | In Area. | | Per Cent. |
| | A. | g. | A. | g. | A. | g. | | | A. | g. | A. | g. | A. | g. | |
| 1 | 9 | 22 | 8 | 11 | 1 | 11 | 13 | 11 | 17 | 3 | 16 | 38 | 0 | 6 | 1 |
| 2 | 25 | 0 | 35 | 4 | 10 | 4 | 40 | 12 | 9 | 22 | 10 | 6 | 0 | 24 | 6 |
| 3 | 16 | 33 | 18 | 7 | 1 | 14 | 8 | 13 | 13 | 17 | 9 | 6 | 4 | 11 | 32 |
| 4 | 13 | 8 | 16 | 30 | 3 | 22 | 27 | 14 | 17 | 20 | 18 | 39 | 1 | 19 | 8 |
| 5 | 20 | 34 | 24 | 18 | 3 | 24 | 17 | 15 | 22 | 2 | 16 | 12 | 5 | 30 | 24 |
| 6 | 1 | 38 | 2 | 11 | 0 | 13 | 16 | 16 | 16 | 8 | 30 | 25 | 14 | 17 | 89 |
| 7 | 2 | 36 | 2 | 38 | 0 | 2 | 2 | 17 | 29 | 26 | 36 | 17 | 6 | 31 | 23 |
| 8 | 3 | 37 | 4 | 6 | 0 | 9 | 6 | 18 | 35 | 19 | 44 | 39 | 9 | 20 | 27 |
| 9 | 2 | 30 | 8 | 24 | 0 | 34 | 31 | 19 | 9 | 5 | 17 | 27 | 8 | 22 | 94 |
| 10 | 13 | 14 | 14 | 0 | 0 | 26 | 5 | 20 | 35 | 10 | 30 | 0 | 5 | 10 | 15 |

The result of the survey was to show in the whole area an error of only 6¾ per cent in the old measurements. [Bom, Gov. Sel. CVII 62.] The details are:

Indapur Area, 1826 and 1866.

| | GO | VERNM | MENT LA | ND. | ALIEN. | ATED 1 | LAND. | DOADS | | |
|----------------------------|---------|----------------|-------------------------|---------|---------|----------------|--------|------------------------|-----------------|--|
| | Arable. | Un- arable. | Grazing and Unassessed. | Total. | Arable. | Unar- able. | Total. | ROADS AND PONDS. | GRAND TOTAL. | |
| | Acres | Acres. | Acres | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | |
| Present Surrey | 270,076 | 18,095 | 18,679 | 306,850 | 13,854 | 1163 | 15,017 | 13,805 | 335,672 | |
| Mr. Pringle's Survey | 238,135 | 17,912 | 43,653 | 299,700 | 13,884 | 765 | 14,649 | 272 | 314,621 | |
| Increase | 31,941 | 183 | | 7150 | | 398 | 368 | 13,533 | 21,051 | |
| Decrease | | | 24,974 | | 30 | | | | | |

It was also found advisable to reclass the lands. Apart from the errors and confusion which were inseparable from a first attempt to introduce a new system, changes of market, new lines of trade, and the opening of the railway compelled a fresh grouping of villages. In re-grouping the villages the classing was based on the permanent distinctions of climate, markets, and husbandry. The state of the landholders was not allowed to affect their position. [Bom, Gov. Sel, CVII, 66.] In fixing fresh rates care had to be taken that improvements made with the holder's capital were not considered grounds for enhancing his rental. In revising the Indapur assessment one of the chief points to consider was the effect of improved communication. When the original survey was introduced there was not a mile of made road in the subdivision. About 1852 the Poona-Sholapur road was completed and made Indapur an important centre of trade. Indapur was still a local centre but it had suffered by the opening of the railway in 1863. The second leading element in fixing revised rates was the change in produce prices. During the five years before the original settlement, the average rupee price of Indian millet was about 106 pounds (53 shers). During the first ten years of the lease little change took place. Indian millet rupee prices ranged from about 144 pounds (72 shers) in 1843-44 to about 72 pounds (36 shers) in 1837-38 and 1845-46, and averaged 113 pounds (561/2 shers). In the first year of the next period of ten years (1846-47) crops failed and Indian millet rose to 30 pounds (15 shers) the rupee. But the price again speedily fell to 144 pounds (72 shers) in 1848-49 and 1849-50. From 1850 it steadily rose to 64 pounds (32 shers) in 1855-56. The average

for the ten years ending 1855-56 was 914 pounds (45¾ shers). From 1856-57 to 1861-62 the price of Indian millet varied from 64 to 54 pounds (32-27 shers) the rupee. During the remaining four years partly on account of the abundance of money in consequence of the American war, but chiefly because of several years of local failure of rain Indian millet remained at 32 pounds (16 shers) the rupee. For the ten years ending 1865-66 the average price was 53 pounds (26½ shers). [Bom. Gov. Sel. CVII. 71. The details are:

Indapur Produce Prices, 1836 - 1866.

| VEAD | Shers the | e Rupee. | Vasa | Shers the | RUPEE. | VEAD | Shers th | e rupee. |
|---------|-----------|----------|---------|-----------|--------|---------|----------|----------|
| YEAR. | Jvari. | Bajri. | Year. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. |
| 1836-37 | 43 | 34 | 1846-47 | 15 | 13 | 1856-57 | 32 | 28 |
| 1837-38 | 36 | 44 | 1847-48 | 48 | 32 | 1857-58 | 39 | 37 |
| 1838-39 | 67 | 30 | 1848-49 | 72 | 56 | 1858-59 | 32 | 28 |
| 1839-40 | 44 | 30 | 1849-50 | 72 | 561/2 | 1859-60 | 39 | 31 |
| 1840-41 | 64 | 44 | 1850-51 | 38 | 34 | 1860-61 | 33 | 23 |
| 1841-42 | 56 | 40 | 1851-52 | 40 | 32 | 1861-62 | 27 | 19 |
| 1842-43 | 68 | 42 | 1852-53 | 56 | 40 | 1862-63 | 16 | 16 |
| 1843-44 | 72 | 44 | 1853-54 | 56 | 36 | 1863-64 | 13 | 12 |
| 1844-45 | 60 | 36 | 1854-55 | 29 | 26 | 1864-65 | 16 | 14 |
| 1845-46 | 36 | 25 | 1855-56 | 32 | 29 | 1865-66 | 18 | 15 |
| Average | 561/2 | 37 | Average | 45¾ | 351/2 | Average | 261/2 | 22 |

In 1836-37 the price of *jvari* is given at 66 *shers* the rupee and of *bajri* at 49, Sel. CVII 70 118.]

The third question for consideration was climate. The uncertain rainfall had prevented the Indapur landholders from realizing the wealth which ought to have accompanied so great a rise in the value of produce. The rainfall was most precarious. For two and three years at a time it was either so scanty or so untimely that no crop came to maturity. In the Kalas group a good crop might be expected once in three years. Of the other two years one wag generally middling and the other utterly bad. During the five years ending 1867 the average rainfall was only 5.85 inches. [The details are: 1861-62inches 250; 1862-63, no returns; 1863-64, 318; 1864.65, 1140; 1865-66, 6.95; 1866-67, 5.24; total 29.27; average 5.85. Bom. Gov. Sel. CVII 73] As regards the weight to be given to the three elements of change, improved communication enhanced prices and rainfall, the rainfall might be dismissed as, though bad, the climate was no worse than it had been at the beginning of the former lease. Communications might also be dismissed as the only tangible way in

which they acted on the landholder was the rise in the price of produce. [The fall in the cost of imports is also a consideration.] Prices have been shown to have risen from 182 pounds (66 shers) to an average of 52 pounds (26 shers) during the ten years ending 1866, that is a rise of 150 per cent. Up till about 1852 grain prices were so low that the original rates remained heavy. No considerable increase of capital had taken place. The years between 1852 and 1856, in spite of some indifferent seasons caused a steady and large increase of wealth. The average rupee price of *jvari* during the five years ending 1856 was 84 pounds (42 shers) and this price, Colonel Francis thought, might be taken as the basis at which the former rates left the landholder a liberal margin. During the ten years between 1856 and 1866 the average rupee price of *jvari* stood at 52 pounds (26 shera) instead of 84 pounds (42 shers) that is a rise of 61½ per cent. Colonel Francis therefore considered that as far as change in the price of grain went, the existing rates should be raised fifty to sixty per cent. [Bom. Gov. Sel. CVII. 74-75.]

The rates proposed by Colonel Francis were for sixty-two of the seventy-six villages a highest dry-crop, acre rate of 2s. (Re. 1); for thirteen villages near Kalas whose distance from the Mahadev hills made the rainfall specially scanty, 1s. 9d. (14 as.); and for the market town of Indapur 2s. 3d. (Rs.1?). Close to the banks of the Bhima were some lands which were occasionally specially enriched by flood deposits. In these the highest acre rate was fixed at 3s. (Rs.1½). The new rates raised the existing assessment by 53 per cent. With this addition the average acre rate on the whole arable area was only 11¹/₄d. (7¹/₂ as.). [The original settlement, cultivated land Rs.81,184, waste Rs.207, total 1,24,700; revised settlement, cultivated land Rs. 1,24,506, waste Rs. 194, total 1,24,700; increase, cultivated land Rs. 43,322, decrease in waste Rs. 13, total increase Rs. 43,309 or 53 per cent. Bom. Gov. Sel. CVII. 77. The rate of increase varied considerably in individual villages. In one case it amounted to 150 per cent, in several it was about 100 per cent, and in some it was only 17 or 18 per cent. Among the villages whose highest acre rate was 2s. (Re.1) the increase ranged from 50 to 100 per cent. The village of Nimbgaon Ketki near Indapur showed one of the smallest increases, 18 per cent. The reason was that it had a considerable area of well-garden land, bearing a special rate for which there was no corresponding entry in the new assessment, as no special rate was to be imposed on wells. In the villages whose highest acre rate was 1s. 9d. (as. 14), the increase varied from 25 to 50 per cent. Colonel Francis ended his report by dwelling on the loss which Indapur suffered from its uncertain and scanty rainfall. He urged that measures should be taken to introduce a large scheme for watering the lands of the subdivision. The proposed settlement was sanctioned by Government in March 1868. [Surv. Comr. Lt.-Col. Francis' Reports of January 1867 and 147 of 12th February 1867, and Gov. Letter 1211 of 27th March 1868. Bom. Gov. Sel. CVII. and CLI.]

1867-68.

In 1867-68 the rainfall was 20 inches at Indapur, 27 at Poona, 26 at Junnar, and 50 at Khadkala. In the sub-divisions along the range of the Sahyadris the rainfall was abundant and favourable and the general state of the early crops was good. In the eastern sub-divisions after the first falls of rain in June, which enabled the cultivators to sow their early crops, there was in July August and September a great want of rain and at one time

a scarcity was feared. Scarcity was averted by a heavy fall of rain in October which in a great measure saved the early crops and produced a more than average late crop. The late harvest in all the sub-divisions was good. In Bhimthadi the landholders admitted that they had not had such fine late crops for many years. The Indian millet was often six and seven feet high, more like Gujarat than *Deccan jvari*. Public health was good. [Mr. Bellasis, Revenue Commissioner, 146 of 16th January 1868, Bom, Gov. Rev. Rec. 59 of 1868, 318.] Tillage rose from 1,784,390 to 1,803,708 acres and collections from £93,730 to £111,609 (Rs. 9,37,300 - Rs. 11,16,090), £4432 (Rs. 44,320) were remitted, and £101 (Rs. 1010) left outstanding. At Indapur the rupee price of Indian millet fell from about 46 to 82 pounds (23 -41 *shers*).

1868-69.

In 1868-69 the rainfall was 8 inches at Indapur, 31 at Poona, 25 at Junnar, and 77 at Khadkala. Except in Sirur Bhimthadi and Indapur, the rainfall, though not seasonable was generally good, and the early crops on the whole did well. Owing to the want of a fall towards the close of the season the yield from the late crops was scanty. Cholera slightly prevailed in a few of the sub-divisions, but on the whole public health was good. [Revenue Commissioner Mr. Ashburner 1264 of 12th April 1869, Bombay GOV, Rev. Rec. 65 of 1869, 253.] Owing to the serious failure of rain in part of Indapur remissions to the extent of fifty per cent were granted in forty-three villages, and twenty-five per cent in thirteen villages. In sanctioning an expenditure of £100 (Rs. 1000) on clearing prickly pear from the grass lands near Allegaon, Government observed that the Khadakvasla water works, on which it was calculated 10,000 men would be engaged, would afford employment enough for those in search of employment. [Gov. Res. 715 of 19th Feb. 1869, Bom. Gov. Rev. Rec. 65 of 1869, 341.] Tillage rose from 1,803,708 to 1,814,896 acres and collections from £111,609 to £115,578 (Rs. 11,16,090-Rs. 11,55,780), £4859 (Rs. 48,590) were remitted, and £43 (Rs. 430) left outstanding. At Indapur the rupee price of Indian millet rose from about 82 to 70 pounds (41-35 shers).

1869-70.

In 1869-70 the rainfall,26 inches at Indapur, 29 at Poona, 25 at Junnar, and 57 at Khadkala, was sufficient and seasonable. Except that rice suffered slightly both the early and the late crops were good. Locusts appeared in a few villages of Junnar, Khed, Maval, and Haveli; but they passed without causing any appreciable damage. Public health was good, though slight cholera appeared in parts of the district. There was no great mortality among cattle. [Rev. Comr. S. D. 74 of 7th Jan. 1870.] Tillage rose from 1,814,896 to 1,819,237 acres and collections from £115,578 to £120,148 (Rs. 11,55,780-Rs. 12,01,480), £479 (Rs. 4790) were remitted, and £27 (Rs. 270) left outstanding. At Indapur the rnpee price of Indian millet rose from about 70 to 58 pounds (35-29 *shers*).

1870-71.

In 1870-71 the rainfall though abundant was not seasonable. The fall at Indapur was 24 inches, at Poona 41, at Junnar 30, and at Khadkala 66 inches. The outturn of the early

crops in Khed, Maval,. Purandhar, and Haveli was fair, but excessive rain caused loss in Indapur, Bhimthadi, Sirur, and Mulshi. Except in Indapur and Bhimthadi where it was indifferent the late harvest was good. Public health was generally good, though in a few villages fever ague and cholera were prevalent. The cattle were generally free from disease. [Rev. Comr. 8. D. 38 of 4th Jan, 1871] Tillage rose from 1,819,237 to 1831,958 acres, collections fell from £120,148 to £111,138 (Rs. 12,01,480-Rs.11,11,380), £476 (Rs. 4760) were remitted, and £255 (Rs. 2550) left outstanding. At Indapur the rupee price of Indian millet rose from about 58 to 50 pounds (29-25 *shers*).

1871-72.

In 1871-72 the rainfall was 15 inches at Indapur, 27 at Poona, 27 at Junnar, and 66 at Khadkala. The rainfall was much below the average, especially in the east. In the west the yield of the *kharif* or early crops was fair except in Junnar where it was not more than half a crop. The *rabi* or late crops throughout the district were at first very unpromising but a slight fall of rain in November revived them. In Indapur the late or *rabi* harvest was about half a crop and in Bhimthadi even less. Some Haveli villages suffered from a failure of water. Except for a few scattered cases of fever and cholera the season was healthy and cattle disease in a few Maval villages. [The Rev. Comr. 1084 of 2nd March 1872, Bom. Gov. Rev, Rec. 81 of 1872, 336.] Tillage rose from 1,831,953 to 1,842,868 acres, collections fell from £111,138 to £96,737 (Rs. 11,11,380-Rs..9,67,370), £5778 (Rs. 57,780) were remitted, and £12,450 (Rs. 1,24,500) left outstanding. At Indapur the rupee price of Indian millet fell from about 50 to 60 pounds (25-30 *shers*).

Bhimthadi 1871-72.

In 1871-72 revised rates were introduced into fifty-four villages of Bhimthadi. Of these fifty-four villages, twenty-three formerly belonged to the Pimpalgaon and thirty-one to the Kurkumb group. At the time of revision survey, with some villages formerly in Purandhar and Baramati, they formed the subdivision of Bhimthadi. [In consequence of the late redistribution of villages, the 1871 Bhimthadi subdivision, part of which was now (1871) under revision, did not correspond with the Bhimthadi sub-division of 1832-39. Surv. Supt. 440A of 12th July 1871, Bom. Gov. Sel. CIL. 201.] The villages of this group stretched east and west in a long narrow belt from the western boundary of Indapur to within twenty miles of Poona. The belt was bounded on the north and east by the Bhima; on the south by a range of hills which divided it from Purandhar and from villages which formerly belonged to Supa, and on the west by the Haveli subdivision. Of the fifty-four villages six had fallen to Government at intervals during the survey lease. Of the remaining forty-eight, which had been settled by Lieutenant Nash in 1840, the area was 382 square miles or 244,623 acres and the population 28,467 that is a pressure of 74 to the square mile. The south-east and south were rough and hilly. The north along the Bhima was level with much fine black soil. In spite of Government offers of rent-free lands for a term of years if the holders would plant them, the whole group was very bare of trees. [Lieut. Colonel Waddington, Surv. Supt. 440A of 12th July 1871. Bom. Gov. Sol. CLI 196.] At Patas the average rainfall in the eight years ending 1870 Was 13.23 inches. The details are:

Patas Rainfall, 1863 - 1870.

| YEAR. | Rainfall. | YEAR. | Rainfall. |
|-------|-----------|---------|-----------|
| | Inches. | | Inches |
| 1863 | 9.52 | 1868 | 10.32 |
| 1864 | 7.83 | 1869 | 22.76 |
| 1865 | 11.69 | 1870 | 26.31 |
| 1866 | 6.57 | Average | 13.23 |
| 1867 | 10.88 | Average | 13.23 |

Bom. Gov. Sel. CL I. 212.]

The only water-work of any size was a reservoir at Kasurdi which had been built in 1838 at a cost of £1182 (Rs. 11,820). A flood in 1843 had swept away its earthen dam which had been repaired by Government shortly before 1870. The supply was believed to be enough to water 250 acres. The chief products were *bajri* and *jvari* which together formed four-fifths of the whole. The remaining fifth was under *math*, gram, wheat, and *kulith* and a little sugarcane, cotton, tobacco, linseed, and vegetables. [In 48 villages *bajri* was 434 per cent, *jvari* 356, *math* 2, *kulith* 0.8 wheat 1, gram 1, sugarcane 0'1, tobacco 01. cotton 0 4, miscellaneous 6'1, and occupied warii 10.5. Bom. Gov. Sel. CLI. 197.] The Pimpalgaon villages grew about twice as much *bajri* as *jvari* and the Kurkumb villages grew about one-sixth more *jvari* than *bdjri*. The revenue was collected in two equal instalments. In the early harvest or *kharif* villages these instalments fell on the 10th of January and the 10th of March; in the late harvest or *rabi* villages they fell on the 10th of February and the 10th of May.

During the survey lease communication in the Bhimthadi villages had been improved by the making of the Poona-Sholapur road and the Peninsula railway. Besides these main lines there were good roads from the station at Kedgaon to Sirur by Pargaon, and to Supa and Jejuri by Padvi. There were three market towns, Patas the mamlatdar's station, Kurkumb, and Yevat, all on the Poona-Sholapur high road. The people were almost all husbandmen. Their chief market was Poona and to a less extent Bombay. Along the Poona-Sholapur road grass and straw fetched good prices. The railway had reduced the road traffic. The toll revenue at Hadapsar had fallen from £1760 (Rs. 17,600) in 1859-60 to £901 (Rs. 9010) in 1870. Still the amount of traffic was considerable.

During the ten years ending 1850-51, that is the first ten years of the survey lease, the rupee price of *jvari* averaged 91 pounds (45½ *shers*) and of *bajri* 73 pounds (36½ *shers*). In the ten years ending 1860-61 the average rate *was jvari* 72 pounds (36 *shers*) and *bajri* 58 pounds (29 *shers*) or a rise of 26 per cent in both cases over the ten previous years. In 1851-52 the first year of this decade, the 1850,-51 prices were maintained, but they fell

again in 1852-53 though not to the same extent as in 1849-50. They then rose in 1858-59, *jvari* to 58 pounds (26 *shers*) the rupee and *bajri* to 42 pounds (21 *shers*), and, in the next two years they fell, *jvari* to 80 and 73 pounds (40 and 36½ *shers*) and *bajri* to 65 and 56 pounds (32½ and 28 *shers*). The ten years ending 1870-71 began *with jvari* at 60 pounds (30 *shers*) and *bajri* at 47 pounds (23½ *shers*). During the next four years prices rapidly rose and during the five closing years (1865-71) they fluctuated, *jvari* never falling below 65 pounds (32½ *shers*) or *bajri* below 39 pounds (19½ *shers*). *Jvari* closed at 36 pounds (18 *shers*) and, *bajri* at 30 pounds (15 *shers*). The average rates for this third decade were *jvari* 39 pounds (19½ *shers*) and *bajri* 30 pounds (15 *shers*) that is 133 and 143 per cent over the corresponding averages of the first decade and of 85 and 93 per cent over those of the second decade. The details are;

Yevat Produce Prices, shers the Rupee 1841-1871.

| YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. |
|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| 1841-42 | 471/2 | 36 | 1851-52 | 36 | 251/2 | 1861-62 | 30 | 231/2 |
| 1842-43 | 55 | 341/2 | 1852-53 | 37 | 29 | 1862-63 | 21 | 18 |
| 1843-44 | 64 | 48 | 1853-54 | 57 | 441/2 | 1863-64 | 151/2 | 10 |
| 1844 45 | 50 | 38 | 1854-55 | 271/2 | 23 | 1864-65 | 11 | 101/2 |
| 1845-46 | 25 | 23 | 1855-56 | 40 | 31 | 1865-66 | 16 | 12 |
| 1846-47 | 151/2 | 15 | 1855-57 | 26 | 24 | 1866-67 | 22 | 191/2 |
| 1847-48 | 37 | 30 | 1857-58 | 33 | 26 | 1867-68 | 11 | 12 |
| 1848-49 | 631/2 | 521/2 | 1858-59 | 26 | 21 | 1868-69 | 321/2 | 191/2 |
| 1849-50 | 64 | 52 | 1859-60 | 40 | 321/2 | 1869-70 | 15 | 131/2 |
| 1850-51 | 36 | 371/2 | 1860-61 | 361/2 | 28 | 1870-71 | 18 | 15 |
| Average | 451/2 | 361/2 | Average | 35¾ | 281/2 | Average | 191/2 | 15 |

Poona Produce Prices, Shers the Rupee, 1841 -1871.

| YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. |
|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| 1841-42 | 30 | 24 | 1851-52 | 33 | 25 | 1861-62 | 26 | 19 |
| 1842-43 | 32 | 28 | 1852-53 | 37 | 29 | 1862-63 | 20 | 15 |
| 1843-44 | 30 | 30 | 1853-54 | 42 | 36 | 1863-64 | 11 | 9 |
| 1844-45 | 27 | 23 | 1854-55 | 25 | 22 | 1864-65 | 12 | 10 |
| 1845-46 | 21 | 18 | 1855-56 | 28 | 25 | 1865-66 | 13 | 11 |

| 1846-47 | 16 | 14 | 1856-57 | 25 | 21 | 1866-67 | 18 | 16 |
|---------|-----|-----|---------|----|----|---------|----|-------|
| 1847-48 | 31 | 27 | 1857-58 | 26 | 23 | 1867-68 | 13 | 11 |
| 1848-49 | 55 | 41 | 1858-59 | 27 | 23 | 1868-69 | 23 | 16 |
| 1849-50 | 47 | 37 | 1859-60 | 34 | 25 | 1869-70 | 16 | 13 |
| 1850-51 | 30 | 25 | 1860-61 | 26 | 21 | 1870-71 | 17 | 14 |
| Average | 32¾ | 26¾ | Average | 30 | 25 | Average | 17 | 131/2 |

Bom. Gov. Sel. CLI. 211.]

The average collections during the ten years ending 1850 were £4341 (Rs. 43,410). In the first year of the settlement (1840-41) the cultivated area was 123,000 acres, and the waste 43,000 acres or about one-fourth, and the assessment was £5307 (Rs. 53,070) of which £160 (Rs. 1600) were remitted, and £5147 (Rs. 51,470) were collected. No great change took place during the next three years. In 1844-45, £2293 (Rs. 22,930) were remitted and in 1845-46 £3134 (Rs.31,340) in which year the collections were only £1772 (Rs. 17,720). During the remaining four years (1846-1850) the collections were steady at about £5000 (Rs. 50,000), and the remissions small. During the ten years ending 1860 the average collections were £5785 (Rs. 57,850) or an increase of 33 per cent on those of the first ten years. This period (1850-1860) began with a year (1850-51) marked by the large remission of £1863 (Rs. 18,630) or 29 per cent of the revenue. From 1850 things began to mend. Cultivation continued steadily to rise from 96,000 acres in 1850-51 to 164,000 acres in 1859-60, and revenue from £2500 to £7365 (Rs. 25,000-Rs. 73,650); between 1854 and 1860 remissions averaged only £2 (Rs. 20). During the ten years ending 1870 the average collections were £7259 (Rs. 72,590) or an increase of 25 per cent on those of the ten years ending 1860 and of 67 per cent on those of the ten years ending 1850. During the ten years ending 1870 the whole of the arable land had been taken for tillage, and, except in 1866-67 when £2073 (Rs. 20,730) were granted, no remissions had been required. During the survey lease (1840-1870) tillage rose from 122,000 acres in 1840-41 to 125,000 in 1841-42 and fell to 107,000 acres in 1846-46. In the next year it rose to 111,000 and again fell to 91,000 in 1849-50. After that it steadily rose to 105,000 in 1852-53, to 120,000 in 1853-54, to 135,000 in 1855-56, to 158,000 in 1856-57, and to 165,000 in 1861-62. In the last two (1868-1870) of the remaining eight years it slightly declined. Collections rose from Rs. 51,000 in 1840-41 to Rs. 55,000 in 1842-43 and fell to Rs. 51,000 in the next year. In 1844-45 they were Rs. 29,000 and in 1845-46 Rs. 19,000. In the next five years they fell from Rs. 46,000 in 1846-47 to Rs. 25,000 in 1850-51. In the next ten years they steadily rose from Rs. 45,000 in 1851-52 to. Rs. 75,000 in 1860-61. In the next nine years, except 1866-67 when they were Rs, 55,000, they stood at about Rs. 75,000. Remissions were Rs. 22,000 in 1844-45, Rs. 30,000 in 1845-46, Rs. 19,000 in 1850-51, Rs. 20,000 in 1866-67, and Rs. 3000 in 1853-54. In other years remissions were few or none. Survey Diagram. Bom. Gov, Sel. CLI. 203.] The following statement shows the revenue collections and remissions during each decade of the survey lease:

Bhimthadi Collections, 1840-1870.

| | Land Re | evenue. | | ue from sources. | other | Total Remissions | | Collec- | Arable W | |
|-------------|---------|---------|--------|---------------------|--------|------------------|-------------|---------|----------|--------|
| YEAR. | Area. | Rental | Grass. | Miscel- laneous. | Total. | Revenue. | Remissions. | tions. | Area. | Rental |
| | Acres. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Acres. | Rs. |
| 1840- 50 | 121,127 | 49,726 | 214 | 5995 | 6209 | 55,935 | 6319 | 49,616 | 51,137 | 29,236 |
| 1850- 60 | 132,332 | 60,156 | 1103 | 5606 | 6709 | 66,865 | 2306 | 64,569 | 32,168 | 14,407 |
| 1860- 70 | 165,744 | 74,665 | 2947 | 5065 | 8012 | 82,677 | 2077 | 80,600 | 1415 | 551 |

In forty-eight villages during the survey lease population increased from 20,401 in 1840-41 to 28,467 in 1870-71 or 39½ per cent; farm-bullocks from 11,568 to 13,792 or 19 per cent; other cattle from 36,931 to 39,050 or 5\% per cent; carts from 273 to 1011 or 270 per cent; and ploughs from 1115 to 1365 or 221/2 per cent. Wells in working order increased from 527 to 727 or 38 per cent. Of the addition of 200 wells, 141 were new and 59 were repaired. Of the 141 new wells eight were made in the ten years ending 1860, forty-one in the ten years ending 1860, and ninety-two in the ten years ending 1870. From a very depressed state at the beginning of the survey lease the Bhimthadi villages had in 1860 reached a high state of wealth and prosperity. [Bom, Gov. Sel. CLI. 199.] The short rainfall in 1863 and 1864 caused severe loss, and in 1866-67 another season of scanty rainfall the loss was so great that as much as £2000 (Rs. 20,000) or about 27 per cent of the collections had to be remitted. Though prices had considerably fallen during the four years between 1866 and 1870 the bulk of the people seemed to be comfortably off, and a record of sales of land showed prices varying from ten to fifty-two times the assessment. In estimating the probable standard of grain prices during future years Colonel Waddington, the survey superintendent, chose as his basis the average of the five years ending 1860 and of the five years ending 1870. This gave a rupee price of about 52 pounds (26 shers) for jvari and about 40 pounds (20 shers) for bajri. These prices were for *jvari* 68 per cent and for *bajri* 72 per cent higher than the average prices during the fifteen years ending 1855. As their conditions were so much alike Colonel Waddington thought that the increase of fifty to sixty per cent which had been introduced into Indapur might be applied to Bhimthadi. This result would be obtained by fixing on the Kurkumb group the highest dry-crop acre rate in sixteen villages at 2s. 6d. (Rs. 1¼) and in nine villages at 1s. 3d. (Rs. 1?). Their nearness to the Poona market and their surer rainfall made the Pimpalgaon villages so much better off than Indapur that to equalize them, in twenty-two of the Pimpalgaon villages the highest dry crop acre rate should be raised to 3s. (Rs. 1½) and in seven villages to 3s. 6d. (Rs. 1¾). Under this arrangement, of fiftyfour villages seven were in the first class with a highest dry-crop acre rate of 3s. 6d. (Rs. 1¾); twenty-two were in the second class with a highest rate of 3s. (Rs. 1½); sixteen were in the third class with a highest rate of 2s. 6d. (Rs. 1¼); and nine were in the fourth class with a highest rate of 2s. 3d. (Rs. 1 1/3). The effect of these rates in forty-eight villages was an increase of 73 per cent. Of this whole increase about £1533 (Rs. 15,330) or twenty per cent was due to the discovery of land held in excess of the recorded area. The following statement shows the effect of the survey:

Bhimthadi Revision Settlement, 1871.

| SETTLEMENT. | Willogo | CULTIVATED LAND | | WASH. | | TOTAL. | |
|-------------|---------|-----------------|----------|--------|---------|---------|----------|
| SETTLEMENT. | v mage. | Area. | Rental. | Area. | Rental. | Area. | Rental |
| | | Acres. | Rs. | Acres. | Rs. | | Rs. |
| Proposed | 48 | | 1,28,971 | 2019 | 871 | 188,795 | 1,29,842 |
| Existing | 48 | 164,618 | 74,222 | 1884 | 644 | 166,502 | 74,866 |
| Increase | | 22,158 | 54,749 | 135 | 227 | 22,293 | 54,976 |

In individual villages the increase varied considerably. In one case it was as high as 120 per cent; in another it was as low as 16 per cent. No rate beyond the highest dry-crop rate was laid on well watered lands. On channel watered land the acre water rate varied from 2s. to 12s. (Rs. 1-6) in excess of the dry-crop rate. This channel water cess yielded £119 (Rs. 1190). Into the six villages which had lapsed to Government since the introduction of the 1840 settlement, the survey had been introduced, leases being granted for terms which would end at the same date as the thirty years lease of the rest of the sub-division. The cultivated area of these six villages was 23,908 acres. Compared with the preceding year's payments their rental under the proposed rates showed an increase from £1160 (Rs. 11,600) to £1675 (Rs. 16,750) or 44 per cent. Under the new survey the total cultivated land in the fifty-four villages was 212,703 acres or an increase of 22,293 acres or 11 per cent. The assessment including the rates on channel watered lands was £14,660 (Rs. 1,46,600) against £8646 (Rs. 86,460) or an increase of 69 per cent. [Lt-Col. Waddington, Surv. Sunt 440A of 12th July 1871. Bom. Gov. Sel. CLL 195 - 210.] Government sanctioned the proposed rates in January 1872. Gov. Res. 385 of 26th Jan. 1872 in Bom. Gov. Sel. CLL 271.]

1872-73.

In 1872-73 in Junnar and Khed the rainfall was much below-the average. In the rest of the district the season was favourable. A heavy fall early in September damaged the early crops especially in Khed, Junnar, and Haveli. In the west the yield of the early crops was fair. The late crops started badly, but a fall early in December did them much service and the outturn was good. The Mavals and the north were the only parts which suffered. The

rainfall was 26 inches at Indapur, 22 at Poona, 15 at Junnar, and 79 at Khadkala. Cholera was present in Poona and its suburbs, and a few cases occurred in Bhimthadi, Purandhar, and Sirur. Dengue fever was general in Poona, Bhimthadi, and Purandhar. [Revenue Commissioner S. D. 6369 of 31st December 1872.] Tillage rose from 1,842,868 to 1,848,831 acres and collections from £96,737 to £112,689 (Rs. 9,67,370-Rs.11,26,890), £547 (Rs. 5470) were remitted, and £4552 (Rs. 45,520) left outstanding. At Indapur the rupee price of Indian millet rose from about 60 to 28 pounds (30-14 *shers*).

Between 1872 and 1874 the revised settlement was introduced *Pabal*, into Pabal. In 1866 the villages of the old Pabal sub-division had 1872-1874, been distributed among Khed, Junnar, Parner, and Sirur. Revised rates were introduced into a group of fifty-six villages of the old Pabal sub-division, and new rates into three villages received from H. H. Holkar. The fifty-six villages had an area of 353 square miles or 225,613 acres and a population of 53,525 or 151 to the square mile. A range of hills running west and east divided the lands of this group into two. To the south was the valley of the Vel bounded southward by a range running from Gulani to Kendur, where it sank into the plain. The eastern border from Nimbgaon to Chincholi was broken and hilly, the rest of the valley was waving and there was much fine land with many water channels. The tract to the north of the central line of hills included the two large valleys of the Ghod and the Mina, the villages lying chiefly along the banks of these streams. The parts to the west were better wooded, and from their nearness to the Sahyadris enjoyed a heavier and less uncertain supply of rain. During the four years ending 1866 the Pabal rainfall averaged 14.91 inches; 11.38 inches fell in 1868, 17.68 in 1864, 16.91 in 1865, and 13.67 in 1866. [The western and northern villages of Pabal had more rain than the eastern villages. The following details of the rainfall at Khed, Ghod, and Junnar on the west and north and at Sirur on the east show that the fall increased towards the , west. From Parner northward the fall of rain was generally good and certain. Bom. Gov. SeL CLI. 303, 304:

Poona Rainfall, 1863-1871.

| YEAR. | Khed. | Ghode. | Junnar. | Sirur. | Pabal. | Up to |
|-------|-------|--------|---------|--------|--------|------------|
| 1863 | 14.62 | 13.38 | 13.56 | 7.86 | 11.33 | 30th Sept. |
| 1864 | 10.63 | 14.30 | 14.78 | 5.33 | 17.68 | Do. |
| 1865 | 13.77 | 17.75 | 13.18 | 14.61 | 16.91 | Do. |
| 1866 | 16.75 | 22.27 | 21.33 | 7.93 | 13.67 | Do. |
| 1867 | 11.55 | 12.90 | | | | 4th Nov. |
| 1868 | 26.38 | 23.34 | 25.31 | 13.88 | | 30th |
| 1869 | 28.05 | 26.0 | 23.92 | 17.60 | | Do. |
| 1870 | 33.05 | 28.67 | 29.62 | 25.95 | | Do. |
| 1871 | 23.93 | 22.29 | 26.75 | 17.47 | | Do. |

| Average | 19.86 | 20.10 | 21.06 | 13.83 | 14.91 | |
|---------|-------|-------|-------|-------|-------|--|
|---------|-------|-------|-------|-------|-------|--|

1

The lands of this group were drained by four rivers, the Bhima, Mina, Ghod, and Vel. As their sources were in the Sahyadris, the Bhima, Mina, and Ghod had an unfailing supply of water, though in consequence of the depth of their channels they were not used for irrigation. The Vel, which rose in a small range about nine miles north-west of Khed and in the hot weather occasionally failed, was of more value to the landholders as its banks were so low that its water could be stopped and used for irrigation by building temporary dams.

The price returns for Talegaon in the south-east and for Manchar in the north-west corner of the Pabal group showed that at Talegaon, the average rupee price of *bajri* during the ten years ending 1871 was about 32 pounds (16 *shers*) compared with about 74 pounds (37 *shers*) during the ten years ending 1851, that is a rise of 131 per cent. At Manchar the corresponding rates were 32 pounds (16 *shers*) instead of 76 pounds (38 *shers*) that is a rise of 137.5 per cent. Compared with the prices of the fifteen years ending 1855 the average price of *bajri* during the ten normal years, five ending 1860.61 and five ending 1870.71, that is leaving out the five American war years, showed a rise of 52.1 per cent. [

The details are:

Pabal Produce Prices: Shers the Rupee, 1841-.1871.

| | | | | TALEC | GAON. | | | | |
|---------|---------|--------|--------|-------|----------|--------|-------|--------|-------|
| YEAR. | Javari. | Bajri. | Wheat. | Gram. | YEAR. | Javari | Bajri | Wheat. | Gram. |
| 1841-42 | 44 | 35 | 26 | 24 | 1851-52 | 40 | 34 | 27 | 26 |
| 1842-43 | 53 | 38 | 26 | 23 | 1852-53 | 52 | 39 | 30 | 20 |
| 1843-44 | 67 | 39 | 30 | 34 | 1853-54 | 35 | 26 | 26 | 22 |
| 1844-45 | 34 | 30 | 27 | 28 | 1854-55 | 23 | 22 | 17 | 18 |
| 1845-46 | 27 | 23 | 20 | 15 | 1855-56 | 39 | 35 | 22 | 26 |
| 1846-47 | 24 | 23 | 13 | 15 | 1856-57 | 31 | 26 | 19 | 24 |
| 1847-48 | 67 | 55 | 17 | 16 | 1857-58 | 31 | 27 | 19 | 20 |
| 1848-49 | 93 | 66 | 31 | 34 | 1858-59 | 37 | 29 | 22 | 19 |
| 1849-50 | 53 | 38 | 31 | 28 | 1859-60 | 57 | 40 | 22 | 23 |
| 1850-51 | 34 | 27 | 23 | 26 | 1860-61 | 43 | 26 | 17 | 16 |
| Average | 50 | 37 | 24 | 24 | Average. | 39 | 30 | 22 | 21 |

| | | | | MANO | CHAR. | | | | |
|---------|----|----|----|------|---------|----|----|----|----|
| 1841-42 | 46 | 42 | 30 | 23 | 1851-52 | 34 | 30 | 28 | 28 |
| 1842-43 | 48 | 34 | 26 | 34 | 1852-53 | 44 | 42 | 30 | 26 |
| 1843-44 | 60 | 43 | 34 | 38 | 1853-54 | 30 | 27 | 27 | 27 |
| 1844-45 | 46 | 42 | 21 | 22 | 1854-55 | 26 | 23 | 21 | 23 |
| 1845-46 | 28 | 23 | 20 | 22 | 1855-56 | 24 | 22 | 20 | 26 |
| 1846-47 | 28 | 26 | 17 | 17 | 1856-57 | 34 | 30 | 22 | 24 |
| 1847-48 | 55 | 44 | 26 | 29 | 1857-58 | 30 | 26 | 22 | 19 |
| 1848-49 | 72 | 58 | 38 | 41 | 1858-59 | 35 | 31 | 26 | 25 |
| 1849-50 | 58 | 42 | 33 | 35 | 1859-60 | 44 | 34 | 23 | 24 |
| 1850-51 | 34 | 28 | 25 | 30 | 1860-61 | 34 | 27 | 18 | 18 |
| Average | 47 | 38 | 27 | 29 | Average | 33 | 29 | 24 | 24 |

continued..

| | Т | ALEGAON. | | |
|---------|--------|----------|--------|-------|
| YEAR. | Javari | Bajri | Wheat. | Garm. |
| 1861-62 | 28 | 23 | 19 | 13 |
| 1862-63 | 15 | 13 | 12 | 13 |
| 1863-64 | 15 | 13 | 11 | 11 |
| 1864-65 | 12 | 10 | 9 | 10 |
| 1865-66 | 27 | 20 | 8 | 10 |
| 1866-67 | 16 | 15 | 10 | 10 |
| 1867-68 | 20 | 16 | 9 | 10 |
| 1868-69 | 20 | 22 | 13 | 15 |
| 1869-70 | 22 | 17 | 9 | 11 |
| 1870-71 | 19 | 15 | 12 | 13 |
| Average | 19 | 16 | 11 | 12 |
| 1861-62 | 29 | 23 | 19 | 14 |
| 1862-63 | 17 | 15 | 15 | 17 |
| 1863-64 | 16 | 14 | 14 | 14 |

| 1864-65 | 13 | 10 | 8 | 10 |
|---------|----|----|----|----|
| 1865-66 | 23 | 17 | 10 | 12 |
| 1866-67 | 24 | 19 | 10 | 9 |
| 1867-68 | 19 | 12 | 10 | 9 |
| 1868-69 | 34 | 21 | 16 | 20 |
| 1869-70 | 19 | 14 | 9 | 9 |
| 1870-71 | 21 | 16 | 9 | 9 |
| Average | 21 | 16 | 12 | 12 |

Manchar Potato Prices: Rupees the Palla, 1848-1871.

| | Rs. | | Rs. | | Rs. | | Rs. | | Rs. | | Rs. |
|---------|------|---------|------|---------|------|-------------|-----|-------------|------|-------------|------|
| 1848-49 | 31/4 | 1852-53 | 31/4 | 1856-57 | 41/4 | 1860- 61 | 4 | 1864- 65 | 7 | 1868- 69 | 21/2 |
| 1849-50 | 21/2 | 1853-54 | 21/2 | 1857-58 | 21/8 | 1861- 62 | 2½ | 1865- 66 | 51/2 | 1869- 70 | 2 |
| 1850-51 | 31/2 | 1854-55 | 23/4 | 1858-59 | 4½ | 1862- 63 | 3 | 1866- 67 | 5 | 1870- 71 | 2 |
| 1851-52 | 2 | 1855-56 | 4 | 1859-60 | 31/2 | 1863- 64 | 4 | 1867- 68 | 4 | | |

TALEGAON, average of fifteen years (1841-42 to 1855-56), *Jvari* 46. *bajri* 35, wheat 24, gram 24; average of ten years (1856-57 to 1860.61 and 1866-67 to 1870.71), *jvari* 30, *bajri* 23, wheat 15, gram 16. MANCHAR, fifteen years' average, *jvari* 42, *bajri* 35, wheat 26, gram 28; ten years' average, *jvari* 29, *bajri* 23, wheat 16, gram 17; potato eight (1848.1856) years' average, Rs. 2 *as.* 15 the *palla* of 120 shers and ten years' average, Ra. 3g. Bom. Gov. Set CLI. 307.]

In the five years (1836-1841) before the former settlement, in the fifty-six villages for which the revision survey prepared a diagram, the average collections amounted to £6651 (Rs. 66,510) and the average remissions to £2276 (Rs. 22,760). The assessment of unoccupied land during the four years ending 1840 varied from £4632 (Rs. 46,320) to £4323 (Rs. 43,230) or about one-third of the whole. In 1841, 10,000 acres of waste were taken for tillage but the very large amount of £3604 (Rs. 36,040) of remissions had to be granted. The introduction of the rates was not completed until 1844-45 and in 1845-46 a considerable area was set apart for free grazing. The first five years shewed no increase of tillage or other improvement. In 1846-47 the cultivated acres were 142,000 and the waste 21,600 or about one-seventh, the assessment on occupied land was £8121 (Rs. 81,210), and the remissions only £6 (Rs. 60). The years 1847-48 and 1848-49 show a

slight increase in cultivation and collections, but, during the three years ending 1852, both cultivation and collections decreased; in 1851-52 the collections amounted to only £8038 (Rs. 80,380). The average cultivation during the six years ending 1852 was 144,742 acres and the average collections £8178 (Rs. 81,780). During the ten years ending 1862 the cultivation and the collections steadily increased. The cultivation rose from 137,673 acres in 1852-53 to 158,556 acres in 1861-62 and averaged 145,251 acres, and the collections from £8083 to £9129 (Rs. 80,830-Rs. 91,290) and averaged £8549 (Rs. 85,490); the only remissions granted were £54 (Rs. 540) in 1853-54. [A part of the increase was due to bringing to account the assessment of alienated lands, which attended the introduction of Captain Wingate's scale of remnneration of village officers in 1853-64. Bom. Gov. Sel. CLI. 310. During the ten years ending 1872 the cultivation and collections remained nearly steady, the average area under cultivation being 161,336 acres, and the average collections £9230 (Rs. 92,300); the only remission during this third term of ten years was £4 (Rs. 40) in 1871-72. The waste land in the last year of the lease was only 508 acres or 0'003 of the total arable area or 0.3 per cent. The following statement gives the average revenue for the thirty-six years ending 1871-72:

Fifty-six Pabal Villages: Revenue, 1836-1872.

| YEAR. | R | ENTAL. | | REMISSIONS. | COLLECTIONS. | |
|-----------|-----------|--------|----------|-------------|--------------|--|
| I LAK. | Occupied. | Waste. | Total. | REMISSIONS. | COLLECTIONS. | |
| | Rs. | Rs. | Rs. | Rs. | Rs. | |
| 1836-37 | 87,560 | 46,318 | 1,33,878 | 18,764 | 68,796 | |
| 1837-38 | 86,421 | 44,480 | 1,30,901 | 15,591 | 70,830 | |
| 1838-39 | 86,907 | 45,162 | 1,31,069 | 26,443 | 59,464 | |
| 1839-40 | 89,657 | 43,234 | 1,32,791 | 16,980 | 72,577 | |
| 1840-41 | 96,916 | 33,185 | 1,30,101 | 36,043 | 60,873 | |
| 1836-1841 | 89,272 | 42,476 | 1,31,746 | 22,764 | 66,508 | |
| 1846-1852 | | | - | 1 | 81,784 | |
| 1852-1862 | | | | | 85,487 | |
| 1862-1872 | | | | | 92,297 | |

In this survey group of fifty-six villages during the survey lease population increased from 48,102 in 1841 to 53,525 in 1871 or 11.27 per cent; bullocks from 18,131 to 18,634 or 2.7 per cent; other cattle from 40,666 to 58,393 or 7.5 per cent; carts from 754 to 1304 or 73 per cent; ploughs from 2715 to 3052 or 124 percent; and wells in working order from 1493 to 1977 or 32.4 per cent. [Between 1861 and 1871, 386 wells were sunk. The well cess imposed in 1840 was most unpopular. In 1843 it was revised, but complaints

still continued. Many wells in good repair fell into disuse, the landholders, in some cases building new walls, exempt from the cess, rather than use old wells on which the tax was imposed. In 1853-54 the sum of Rs. 1875 was remitted on account of unused wells and water channels. Bom. Gov. Sel. CLI. 306.] The land was more regularly and carefully tilled in the Pabal villages than in East Poona. Both light and heavy soils were ploughed every year. A six or eight-bullock plough was used for heavy soils, and a four-bullock plough for light soils. January or February ploughing was considered more useful than ploughing later in the season. Besides ploughing them it was usual to harrow all kinds of soil before sowing, and to weed with the hoe once or twice after the crops had sprung up. Garden lands, as a rule, were ploughed twice, once lengthways and once crossways before each crop, and 25 to 30 cartloads of manure an acre were always given though the price varied from 1s to 4s. (Rs. $\frac{1}{2}$ - 2) and was sometimes even as high as 6s. (Rs. 3) the cartload. Dry-crop lands occasionally received ten to fifteen cartloads of manure the acre. The use of manure on dry-crop lands was much more general than it had been some years before. In the dry-crop soils either late or early crops were grown. Of the early or *kharif* crops the lighter soils yielded year after year bajri mixed with hulga, math, jvari, ambadi, and mug; in the better spils were grown bajri, with every fourth furrow bajri and tur; bajri only, followed in good seasons by a late crop of gram; udid and mug grown separately, followed in good seasons by wheat or gram after udid, and by kardai or jvari after mug; potatoes, which when raised as an early crop, in good seasons, were succeeded by gram wheat or *jvari*. As a rule *rabi* or late crops were grown only on the best soils. They included *ivari* generally mixed with *kardai*, or wheat mixed with *kardai*, or gram, followed in the fourth year by bajri, and in good seasons by a second crop. The above were the only rotations. In garden land the usual rotation was in the first year bajri or potatoes with a late crop of wheat, gram, or vegetables; in the second year earthnut or chillies; in the third year sugarcane or bajri with a late crop. In most villages large numbers of sheep were reared as Poona furnished a certain and convenient market. The wool was sold to the weavers, and the droppings formed one of the best manures and were carefully collected in the pens in which the sheep were folded at night. Especially in gardens the sub-divisions of land were very minute and the right of occupancy was jealously guarded. The land bore a high sale value. In some instances dry-crop land was sold or mortgaged for as much as 116 to 160 years' purchase of the assessment.

Though the line did not pass through any part of it, the Pabal group had gained by the opening of the Peninsula railway. The stations at Uruli and Talegaon Dabhade afforded easy access to the Bombay market. The group was also crossed from south to north by the Poona-Nasik road, and from west to east by the Poona-Ahmadnagar road. There were also several good fair-weather roads, and two metalled high roads, one branching from Shikrapur and forming a direct line to Talegaon on the railway, the other connecting the town of Pabal with Poona. A fair-weather road from Pabal to Sirur by Malthan was nearly completed. The Bhima at Koregaon and the Ghod at Kalamb were crossed by ferries during the rainy season and a substantial bridge spanned the Vel at Shikrapur. The only road which remained to complete the system of communication was the road from Sirur to Narayangaon. The fall in the toll farm from £2250 (Rs. 22,500) in 1865-66 to £520 (Rs. 5200) in 1872-73 showed how greatly railway competition had reduced cart traffic. [Lieut.-Col. Waddington, Surv. Supt. 689 of 10th October 1872. Bom. Gov. sel.

CLI. 301. The toll amounts were (farmed) 1865-66 Rs. 22,500, 1866-67 Rs. 19,500, 1867-68 Rs. 16,000, 1868-69 Rs. 14,000, 1869-70 Rs. 12,000, 1870-71 Rs. 10,500; (managed by Sirur mamlatdar) 1871-72 Rs. 6295, and (farmed) 1872-9 Rs. 5200.] The chief towns, none of which were of any considerable size, were Pabal, Talegaon, Manchar, and Kauta. Weekly markets were held at each of these towns and also at Vapgaon; and Narayangaon and Khed were convenient markets for the villages near them. On the whole the people had great advantages in disposing of their field produce; no part of the group was more than five or six miles from a market town. Tillage was almost the only industry. There were 217 looms some for blankets others, for coarse cottons. Lavish expenditure on marriages and other social ceremonies had kept the people dependent on the money-lenders. Still their state had greatly improved since 1841. The chief causes of their improvement were a sufficient and a fairly certain rainfall, unbroken peace, low assessment, the extended use of the potato, the opening of the railway and of roads, and the rise in grain prices. [Lieut.-Col. Waddington, Surv. Supt. 689 of 10th October 1872, and Col. Francis, Surv. Comr, 273 of 13th Feb, 1873. Bom. Gov. SeL CLI. 305, 351-352.]

The fifty-six villages were arranged in six classes with highest dry-crop acre rates varying from 6s. to 3s. 6d. (Rs. 3 -1¾). The two elements for reducing rates were less certain rain and more distant markets. The first class contained one village with a highest dry-crop acre, rate of 6s. (Rs. 3); the second class contained sixteen with 5s. 6d. (Rs. 2½); the fourth class, twelve with 4s. 6d. (Rs. 2¹/₄); the fifth class, eight with 4s. (Rs. 2); and the sixth class, six with 3s. 6d.(Rs. 13/4). Of the three villages received from Holkar one was placed in the first, one in the third, and one in the fifth class. There were no masonry dams, but, especially along the Vel, the people made temporary embankments. The chief crops grown under the channels were sugarcane, potatoes, earthnut, chillies, vegetables, and garlic in a few villages. The highest acre rate proposed for channel water was 12s. (Rs. 6) and the lowest 2s. (Re. 1). The assessment on this account amounted to £563 (Rs. 5630) or an average acre rate of 5s. 3d. (Rs. 2?). The total former assessment on wells and channel together was £1343 (Rs. 13,430) of which only £1203 (Rs. 12,030) were collected in 1871-72, the remainder being remitted as the wells were not in use. Under the revision survey no extra assessment was imposed on well lands, a change which, on the 10,047 acres of well land, represented a loss to Government of £2000 to £2500 (Rs. 20,000-25,000). Of rice land, there were only ninety-two acres. As it was of superior quality the highest acre rate was fixed at 10s. (Rs.5), and the average at 6s. $2\frac{3}{8}d$. (Rs.3 as. 17/12). The proposed rates increased the assessment on Ansari, the only village in the first class by 70 per cent; on the villages of the second class by 74 per cent; on those of the third class by 94 per cent; on those of the fourth class by 90 per cent; on those of the fifth class by 95 percent; and on those of the sixth class by 103 per cent. The average increase on all the fifty-six villages was 88 per cent over the previous year's payments. The following statement shows the effect of the survey:

| SETTLEMENT. | OCCU | UNOCC | CUPIED. | TOTAL. | | |
|-------------|------------|---------|---------|---------|---------|---------|
| SETTLEMENT. | Area. | Rental. | Area. | Rental. | Area. | Rental. |
| | Acres. Rs. | | Acres. | Rs. | Acres | Rs. |
| Proposed | 181,076 | 173,898 | 567 | 360 | 181,643 | 174,258 |
| Existing | 160,692 | 92,359 | 548 | 230 | 161,240 | 92,589 |
| Increase | 20,384 | 81,539 | 19 | 180 | 20,403 | 81,669 |

Compared with the average collections between 1862 and 1871 the revised survey rental showed an increase of £8160 (Rs. 81,600) or 88 per cent; and compared with the average collections from 1836 to 1840 they showed an increase of;610,739 (Rs. 1,07,390) or 161 per cent. The rental of the three villages received from Holkar was raised 60 per cent. The greatest individual increase was a rise of 159 per cent in Eklahara. The largest general increase, 103 per cent, was in the lowest or sixth class in which the average dry-crop acre rate was only 1s. 31/8d. (10 1/12 as.). The highest dry-crop acre rate, which occurred in Pimpalgaon, was 3s. 103/4d. (Re. 1 as. 15 1/6). The average dry-crop acre rate in the fifty-six villages was 1s. 101/4d. (14 5/6as.). [Lt.-Col. Waddington, 689 of 10th Oct. 1872. Bom. Gov. Sel. CLI. 297-314.]

In forwarding the Superintendent's proposals, the Survey Commissioner Colonel Francis made some changes in the grouping of villages and removed the first class rate of 6s. (Rs. 3). His proposals reduced the increase in the total rental of the fifty-six villages from 88 to 85 per cent and of the three villages received from Holkar from 60 to 45 per cent. He next suggested that in addition to this a reduction of four annas a class for the first four classes and of two annas in the fifth or last class might be made in the highest dry-crop acre rates. This would reduce the rates to 5s. (Rs. 24), 4s. 6d. (Rs. 21/4), 4s. (Rs. 2), 3s. 6d. (Rs. 134), and 3s. 3d. (Rs. 1?), and bring the increase down to 65 or 66 per cent. [Col. Francis, Surv. Comr. 273 of 13th Feb. 1873, Bom. Gov. Sel. CLI. 349-356. Government adopted a somewhat different grouping from that proposed by the survey officers. They sanctioned the following highest dry-crop acre rates, 5s. (Rs. 2½) for nine villages, 4s. 3d. (Rs. 2?) for nine villages, 4s. (Rs. 2) for twenty-four villages, and 3s. 3d. (Rs. 15/8) for seventeen villages. With these rates the increase on the whole fifty-nine villages amounted to about 75 per cent beyond the old assessment in place of the 88 per cent proposed by the Superintendent. [Gov. Res. 2158 of 16th April 1873, Bom, Gov. Sel. CLI, 361-364. The final result of the revised settlement introduced into the fifty-nine villages of the Pabal group was as follows: Under the revised settlement, the average drycrop acre rate was 1s. 6?d. (12½ as.), the water rate 4s. 7.5/8 d. (Rs. 2 as. 5.1/12), and the rice land rate 6s. 8d. (Rs. 3 as. 5 1/12). The total assessment on occupied lands was £15,151 (Rs. 1,51,510) or £3819 (Rs. 38,190) less than that originally proposed by the Superintendent, and £4928 (Rs. 49,280) or 48 per cent more than the former assessment. [Bom. Gov. Sel. CLI. 364-379.]

The revised survey settlement was introduced into Haveli in 1872-73. Of the eighty-four villages under revision, twenty-one of which formerly belonged to Bhimthadi and seven had since the first settlement been transferred to Maval, three villages were omitted as survey rates had been introduced into them within the preceding fifteen years. The Haveli or mamlatdar's group was bounded on the north by the Bhima and Indrayani; on the east by Bhimthadi; on the south by the Sinhgad-Bhuleshvar hills; and on the west by the Nane Maval, the Mulshi petty division, and the Pant Sachiv's territory. Nearly in the centre was Poona a city of 90,436 people from which no part of the group was more than eighteen miles distant, and which formed a ready and convenient market for all kinds of produce. The total area of the eighty-one villages was 319 square miles or 204,135 acres. Of these 10,198 acres or 4.8 per cent was unarable land included in numbers, and 18,346 or 8.8 per cent was alienated. There were also 6673 acres of grass or kuran land, chiefly in the villages to the west of Poona and near the Sahyadris. The Haveli sub-division was more varied than any of the sub-divisions yet resettled. East of Poona the country was flat, open, and almost bare of trees; to the west it was rugged and hilly, and much of it well wooded, especially along the south side of the Mutha river where were large numbers of fine mangoes and a sprinkling of jack trees which were unknown to the east of Poona. Teak occurred on the hill sides but never grew to any size. The climate varied much, the rainfall increasing towards the west, until, in the border villages rice and nagli took the place of *iyari* and *bajri*. The lands to the east of the city were divided into two nearly equal portions by the Mutha-Mula. The tract lying between the Mutha-Mula and the Bhima comprised some of the poorest villages. It was chiefly stony sterile upland, better fitted for sheep grazing than for tillage. The people made the most of their barren inheritance, every available gorge in the ravines being blocked with rough stone embankments to gather and hold the scanty soil washed from the higher grounds. The district to the south between the Mutha and the hills was much more level, and contained a large proportion of rich soil. Even the villages under the hills were not unfertile, the more plentiful rainfall which they enjoyed making up for their somewhat poorer soil. Towards the west the rainfall was heavier. During the nine years ending 1871, compared with an average of 27.07 inches at Poona, Patas about forty miles to the east had an average of 14.1S inches and Mulshi about twenty-live miles to the west, of 46.99 inches. [Bom, Gov. Sel. CLI, 400. The details are:

Poona-Patas-Mulshi Rainfall, 1863-1871.

| YEAR. | Poona. | Patas. | Mulshi. | Up to |
|-------|---------|---------|---------|------------|
| | Inches. | Inches. | Inches. | |
| 1863 | 22.55 | 9.52 | 54.20 | 30th Sept. |
| 1864 | 16.55 | 7.83 | 45.34 | Ditto. |
| 1865 | 31.28 | 11.69 | 43.96 | Ditto. |

| 1866 | 18.90 | 6.57 | 54.70 | 4th Nov. |
|---------|-------|-------|-------|-----------|
| 1867 | 27.29 | 10.88 | 26.69 | Ditto. |
| 1868 | 30.91 | 10.32 | 51.48 | 30th Nov. |
| 1869 | 28.16 | 22.76 | 39.28 | Ditto. |
| 1870 | 40.60 | 26.31 | 61.50 | Ditto. |
| 1871 | 27.38 | 21.75 | 45.80 | Ditto. |
| Average | 27.07 | 11.18 | 46.99 | |

]

The country was well watered. Besides by minor streams it was crossed by five considerable rivers including the Bhima and the Indrayani on. the north. [The Bhima, the Indrayani, the Mula, the Patina, and the Mutha.] During the survey lease (1841-1871) Poona produce prices had doubled. The rupee price of *jvari* rose from about 63½ pounds (31¾ *shers*) in the ten years ending 1851 to 60 pounds (30 *shers*) in the ten years ending 1861, and to 34 pounds (17 *shers*) in the ten years ending 1871; the corresponding averages for *bajri* were 53½, 50, and 27 pounds (26¾, 25, and 13½ *shers*). [In 1840, at the time of the first settlement, Gapt. Wingate and Lt. Nash estimated that the price of grain ranged about 25 per cent higher in Poona than in the adjoining sub-division of Bhimthadi. The statement given below shows that from 1841 to 1851 the average price of *jvari* was 30 and of *bajri* 35 per cent higher in Poona than in Yevat; from 1851 to 1861 the price of *jvari* was 19 and that of *bajri* 15 per cent higher; but during the last ten years (1861-1871), owing to the levelling influence of railways, the difference fell to 13 per cent on *jvari* and 11 per cent on *bajri*, while in 1871 it was only 50 on *jvari* and 7 on *bajri*. Bom. Gov. Sel. CLI. 409. The details are:

Poona-Yevat-Talegaon Produce Prices, 1841-1871.

| VEAD | POONA. | | YEVAT. | | TALEGAON | | | POONA. | | YEVAT. | | TALEGAON. | |
|---------|--------|--------|--------|--------|----------|--------|---------|--------|--------|--------|--------|-----------|--------|
| YEAR | Jvari. | Bajri. | Jvari. | Bajri. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. | Jvari. | Bajri. | Jvari. | Bajri. |
| 1841-42 | 30 | 24 | 471/2 | 36 | 44 | 35 | 1851-52 | 33 | 25 | 36 | 251/2 | 40 | 34 |
| 1842-43 | 32 | 28 | 55 | 341/2 | 53 | 38 | 1852-53 | 37 | 29 | 37 | 29 | 53 | 39 |
| 1843-44 | 30 | 30 | 64 | 48 | 67 | 39 | 1853-54 | 42 | 36 | 57 | 441/2 | 35 | 24 |
| 1844-45 | 27 | 23 | 50 | 38 | 34 | 30 | 1854-55 | 25 | 22 | 271/2 | 23 | 23 | 22 |
| 1845-46 | 21 | 18 | 25 | 23 | 27 | 23 | 1855-50 | 28 | 25 | 40 | 31 | 39 | 35 |
| 1846-47 | 16 | 14 | 151/2 | 15 | 24 | 23 | 1856-57 | 25 | 21 | 26 | 24 | 31 | 26 |

| 1847-48 | 31 | 27 | 37 | 30 | 67 | 55 | 1857-58 | 26 | 23 | 33 | 26 | 31 | 27 |
|---------|-----|-----|-------|-------|----|----|---------|----|----|--------|-------|----|----|
| 1848-49 | 55 | 41 | 631/2 | 521/2 | 93 | 66 | 1858-59 | 27 | 23 | 26 | 21 | 37 | 29 |
| 1849-50 | 47 | 37 | 64 | 52 | 53 | 38 | 1859-60 | 34 | 25 | 40 | 321/2 | 57 | 40 |
| 1550-51 | 30 | 25 | 36 | 371/2 | 34 | 27 | 1860-61 | 26 | 21 | 361/2 | 28 | 43 | 26 |
| Average | 31¾ | 26¾ | 45¾ | 361/2 | 50 | 37 | Average | 30 | 25 | 35 4/5 | 28 | 39 | 30 |

Poona-Yevat-Talegaon Produce Prices. 1841 -1871—continued.

| VEAD | POONA. | | YEV | AT. | TALEGAON. | | |
|---------|--------|--------|---------------|-------|-----------|--------|--|
| YEAR. | Jvari. | Bajri. | Jvari. Bajri. | | Jvari. | Bajri. | |
| 1861-62 | 26 | 19 | 30 | 231/2 | 28 | 23 | |
| 1862-63 | 20 | 15 | 21 | 18 | 15 | 13 | |
| 1863-64 | 11 | 9 | 151/2 | 10 | 15 | 13 | |
| 1864-65 | 12 | 10 | 11 | 101/2 | 12 | 10 | |
| 1865-66 | 13 | 11 | 16 | 12 | 27 | 20 | |
| 1866-67 | 18 | 16 | 22 | 191/2 | 16 | 15 | |
| 1867-68 | 13 | 11 | 14 | 12 | 20 | 16 | |
| 1868 69 | 23 | 16 | 321/2 | 191/2 | 20 | 22 | |
| 1869-70 | 16 | 13 | 15 | 131/2 | 22 | 17 | |
| 1870-71 | 17 | 14 | 18 | 15 | 19 | 15 | |
| Average | 17 | 131/2 | 19½ | 15 | 19 | 16 | |

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In the group of eighty-one villages the average collections during the five years before the first settlement were £6445 (Rs. 64,450), and the average remissions £2534 (Rs. 25,340). During the eleven years ending 1852 the average collections were £6974 (Rs. 69,740) or 8.2 per cent more than the collections of the five years ending 1841 and the average remissions were £42 (Rs. 420). In 1841-42 the first year of the survey settlement the total area of Government assessed land was 124,500 acres and the rental £7450 (Rs. 74,500); of which 16,000 acres or nearly one-eighth was waste. In 1843-44 the levy of a well-cess raised the assessment to £7708 (Rs. 77,080); but the same year £100 (Rs. 1000) and in the succeeding year £199 (Rs. 1990) of the newly imposed cess were remitted. After 1849-50 the whole amount was collected except about £40 (Rs. 400). In 1851-52 the arable waste was reduced to 10.000 acres or one-twelfth of the whole arable area.

During the ten years ending 1862 the arable waste fell from 9777 to 1922 acres, and the average remissions on account of well-cess were £18 (Rs. 180). The largest remission during the thirty-one years ending 1861 was £679 (Rs. 6790) in 1853-54. The average collections during the ten years ending 1862 were £7626 (Rs.76,260) or 9.3 per cent more than the collections of the eleven preceding years and 18.3 per cent more than those of the five years before the settlement. The average remissions were £73 (Rs. 730). Since 1862 the arable waste was gradually absorbed until in 1871-72 only 634 acres of arable land remained unoccupied. Since 1856 there were almost no remissions, and the average collections for the ten years ending 1872 were £7815 (Rs. 78,150) or 2.5 per cent more than the preceding ten years, and 21.3 per cent more than the five years (1836-1841) before the settlement. They would have been greater had not a considerable quantity of land been taken for forest and other Government purposes, such as the powder works at Kirkee and for Lake Fife. The TILLAGE area rose from 109,000 acres in 1841-42 to 117,000 acres in 1846-47, fell to 115,000 in 1852-53, and again rose to 125,000 acres in 1860-61. Since 1866 it began to decline and reached 121,000 acres in 1871-72. The largest remissions were about Rs. 6800 in 1853-54. In other years there were little or no remissions. The collections rose from Rs. 65,000 in 1841-42 to Rs. 71,000 in 1846-47. They fell to Rs. 70,000 in the next five years, rose to Rs. 71,000 in 1852-53, and again fell to Rs. 67,000 is 1853-54. They then rose to Rs. 77,000' in 1857-58 and stood at Rs. 79,000 during the next six years. Since then they began to decline and reached Rs. 76,000 in 1871-72. Survey Diagram. Bom. Gov. Sel. CLI. 410.]

Haveli, Eighty-one Villages: Revenue, 1836-1872.

| VEAD | | Dental. | Damissians | Collections. | | |
|-----------|-----------|-------------|------------|--------------|-------------|--|
| YEAR. | Occupied. | Unoccupied. | Total. | Remissions. | Conections. | |
| | Rs. | Rs. | Rs. | Rs. | Rs. | |
| 1836-37 | 90,118 | 44,948 | 1,35,066 | 19,089 | 71,029 | |
| 1837-38 | 88,976 | 38,017 | 1,26,993 | 26,567 | 62,409 | |
| 1838-39 | 89,503 | 35,060 | 1,25, 563 | 35,097 | 54,406 | |
| 1839-40 | 90,543 | 35,904 | 1,26,447 | 27,677 | 62,866 | |
| 1840-41 | 89,834 | 36,268 | 1,26,102 | 18,281 | 71,553 | |
| 1836-1841 | 89,795 | 38,239 | 1,28,034 | 25,342 | 64,452 | |
| 1841-1852 | | | | 419 | 69,744 | |
| 1852-1862 | | | | 729 | 76,262 | |
| 1862-1872 | | | | | 78,152 | |

During the survey lease, in the eighty-one villages, population had increased from 37,695 in 1840-41 to 53,829 in 1871-72 or 428 per cent; houses from 6598 to 7079 or 7'3 per cent; carts from 1146 to 2655 or 131.7 per cent; ploughs from 1907 to 2284 or 19.8 per cent; draught and plough bullocks from 15,899 to 17,811 or 12 per cent; cattle, sheep, and horses from 26,890 to 34,845 or 296 per cent; and working wells from 799 to 1091 or 36.5 per cent. Of 418 new wells 276 had been sunk during the ten years ending 1872. The liberal remission of the well cess was beginning to have the best effect. Several landholders in the Haveli group, on being assured by the Survey Superintendent that the wells were not to be taxed under the revision survey and that Government were prepared to help them with advances, took to sinking wells. Especially in the north-east villages many dams were also built with the object of collecting soil to prevent the fields being damaged by floods. The style of tillage showed more energy and care than in parts of the district at a distance from good markets. Manure was eagerly sought for and brought from long distances. The city and cantonment of Poona furnished a large supply in the shape of night-Soil which, after being buried in trenches for three or four months, was bought by the landholders of the surrounding villages. A few years before no Kunbi would touch this form of manure. The price paid at the trench was 2s. (Re. 1) for three carts. Of dry-crops both early and late were grown. They included bajri, jvari, gram, tur, wheat, khurasni, udid, and mug. Near Poona those crops were grown which were calculated to meet the daily demands of a large city. Thus early *jvari* and maize for green fodder to a great extent superseded grain. In garden lands, for some miles round Poona, oranges, limes, guavas, plantains, figs, pomegranates, grapes, and mangoes, and vegetables of all kinds both local and foreign were reared to a large extent. Lucerne grass was much grown and was a profitable crop. It required watering once in twelve or fifteen days, and continued to yield for three years. The guava also gave a good return; it preferred a light soil and required water only during the bearing seasons, between October and December and again between April and May. The tree was very hardy and generally yielded a certain crop. It was usual for the husbandmen to sell the crop of oranges, limes, and mangoes on the tree as soon as the young fruit was fairly set. But figs were so uncertain that the crop was seldom bought until it was well developed. Betel vine gardens or pan malas were numerous especially in the villages of Kondva, Undri, Mahamadvadi, and Phursangi. These gardens required a large outlay at starting, and, throughout the year, constant attendance for weeding, watering, insect-killing, and leafgathering. They paid well, the returns being constant, as the rows of vines were arranged so as to come into bearing in regular rotation. A betel garden or pan mala continued to yield from ten to fifteen years. The potato was not grown, apparently because the eastern villages had too small a rainfall and the western villages too much moisture. In the western villages the early harvest was the most important, the chief crops being early jvari and bajri, supplemented by tur, til, nachni, and wheat. Rice was also grown in a few of the border villages, notably in Rahataunda, Arvi, Marunji, Kasarsai, Mulkhed, and Bhukam. The villagers complained that, owing to the recent transfer of large tracts of hill land to the Forest Department, they had not sufficient brushwood to burn on their rice lands; the Survey Superintendent thought this would seriously interfere with the growth of rice, as cowdung, which the people were forced to use, was too expensive on account of the large city demand for cowdung fuel. The western villages had little garden land, probably because a certain rainfall ensured a regular return on the dry-crop lands. They

also left much land under grass, which, from the plentiful rainfall, grew freely, and found a ready sale. Every day long strings of men and women brought bundles of grass, firewood, cowdung-cakes, and milk to the camp and city. In 1871-72 of the whole rentpaying area early crops covered 52½ per cent, late crops 34 per cent, and occupied waste 13½ per cent. The area of occupied waste held for private grazing was large. Vagholi, Khoradi, Vadgaon, Sheri, Kesnand, and Lohogaon, from their nearness to Poona, had considerable tracts under grass, which probably paid better than if they had been cultivated. [The details were: Of the early crops, bajri 34.5 percent, jvari 13.5, rice 1.8, nagli 0.9, til and rala 0.5, tur 0.3, chillies 0.3, hulga 0.3, and bhuimug 0.2, total 52.3 per cent. Of the late crops, *jvari* 26.9, wheat 3.2, gram 1.3, castor seed 0.6, sugarcane 0.6, miscellaneous 16, total 34.2; occupied waste 13 5. Bom. Gov. Sec, CLI. 403.] Except some villages to the north-west of Poona, Haveli was abundantly provided with means of communication. The Peninsula railway ran through the middle of it and had five stations within Haveli limits and a sixth just beyond. The high roads were numerous and good. the chief being those to Bombay, Ahmadnagar, Sholapur, and Satara. To Satara there were three routes, by the Katraj, Babdey, and Diva passes, all made with great skill and in the most substantial manner, the top of the Katraj pass being pierced by a long tunnel. Many miles of excellent made road crossed the Poona cantonment, and connected it with Kirkee and the city. There was also a second class road by Narayangaon to Junnar and Nasik. All these roads converged on the city and afforded easy access from all parts of the sub-division to the vast quantity of supplies required by a population of over 90,000. In the opinion of Mr. Fletcher the classing officer, the people to the west of Poona were poorer and less thriving than those in the east. The holdings were smaller, there was a want of roads, and the land was less fertile. Colonel Waddington thought this might be true of a few exceptional villages. But on the whole the people of the sub-division were better off than the people of any other part of the district. [Lieut.-Colonel Waddington, Survey Superintendent, 840 of 30th November 1872. Bom. Gov. Sel. CLI. 404.] As regards the value of land, as much as one hundred times the amount of the assessment was obtainable in 1871.

Under the revision survey the total area of the eighty-one villages was found to be 204,135 acres or 28,031 acres more than the former recorded area. This large discrepancy was mainly due to the fact that at the time of Lieutenant Nash's survey the area of free grazing lands was not measured. Of this large increase in area Col. Francis (Survey Comr. 497 of 24th Mafch 1873, Bom. Gov. Sec. CLI. 457) wrote: In no reassessed district has been found the former survey so imperfect as it has been found to be here. This is owing chiefly to the general adoption of Mr. Pringle's measurements at the first settlement in place of a fresh survey. The largest differences of area, compared with the present survey, occur in hilly lands, which in some cases seem to have been left unmeasured, and in others shown as unarable, though producing grass, and most valuable for grazing on account of their nearness to Poona. In one case the arable area, according to the new survey is shown to be more than double what was charged for under the original settlement; in another case it is 90 per cent more, and in many cases it is between 20 and 30 per cent in excess. Of the total number of eighty-four villages, seventy-four were arranged in eight classes with highest dry-crop acre rates varying from 8s. to 3s. 6d. (Rs.4-134). Three villages, Vanori Ghorpuri and Kirkee, adjoining the cantonment were

placed in the first class with a rate of 8s. (Rs. 4). Six villages on the skirts of the city and across the Mutha river were placed in the second class with a rate of 7s. (Rs. 3½). Twenty-six villages adjoining the first and second classes were placed in the third class with a rate of 6s. (Rs. 3). Thirteen villages formed the fourth class with a rate of 5s. 6d. (Rs. 2¾). Nine villages formed the fifth class with a rate of 5s. (Rs. 2½). Five villages formed the sixth class with a rate of 4s. 6d. (Rs. 2¼). Nine villages formed the seventh class with a rate of 4s. (Rs. 2). Three villages, across the Mutha-Mula in the north-east corner of this survey group, formed the eighth class with a rate of 3s. 6d. (Rs.1¾). Of the remaining ten villages, seven villages transferred to the Maval sub-division were placed in the fifth class with a rate of 5s. (Rs. 2½), and the three villages, of which the existing settlement had been carried out subsequent to that of the rest of the sub-division, were placed one in the third, one in the fourth, and one in the fifth class.

There was little channel watered land, and except in the village of Pashan the watersupply in none of the channels was of superior quality. In Pashan, in consequence of the improvement in the supply of water caused by the recent construction of a large pond, the Survey Superintendent proposed to apply a highest acre rate of 16s. (Rs. 8) in excess of the dry-crop rate. The highest rate in other villages was 11s.(Rs. 5½) and in some lands it was as low as 2s. (Re. 1). The existing assessment on well-watered and channel-watered land was £470 (Rs. 4700); the proposed channel watered assessment was £223 (Rs. 2230) or an average acre rate of 5s. 3½d. (Rs. 2 as. 10?) exclusive of dry-crop rate. Rice was grown to some extent in the villages on the western border, but the total area under rice was only 1095 acres. Colonel Francis' highest rice acre rate for the contiguous Maval villages was 9s. (Rs. 4½), the average acre rate on them being 4s. 3? d. (Rs. 2 as. 2 5/12). For the Haveli group the highest rice acre rate proposed was 12s. (Rs. 6) which when applied gave an average acre rate of 7s. $3\frac{1}{2}d$. (Rs. 3 as. 10?). The effect of the proposed rates in eighty-one villages was to raise the assessment on occupied land from £7686 (Rs.76,860) collected in 1871-72 to £15,312 (Rs. 1,53,120) or an increase of 99 per cent. Of this sum £14,689 (Rs. 1,46,890) was the assessment on dry-crop land, giving an average acre rate of 2s. 1d. (Re. 1 a.?), £223 (Rs. 2230) were on account of a water cess, and £400 (Rs.4000) on rice land. In the remaining three villages the assessment was raised from £361 (Rs. 3610) to £532 (Rs. 5320) or not quite 48 per cent, but the average dry-crop acre rate amounted to 2s. 3/4d. (Re. 1 a. 1/2) or nearly the same as the general average.

The following statement shows the effect of the survey in eighty-one villages:

| Н | Iavel | i R | evisio | on S | ettl | ement. | 1872. |
|---|-------|-----|--------|------|------|--------|-------|
| | | | | | | | |

| SETTLEMENT. | OCCU | UNOCC | CUPIED. | TOTAL. | | |
|-------------|--------|---------|---------|---------|-------|---------|
| | Area. | Rental. | Area. | Rental. | Area. | Rental. |
| | Acres. | Rs. | Acres. | Rs. | Acres | Rs. |

| Proposed | 142,200 | 1,53,118 | 344 | 399 | 142,544 | 1,53,517 |
|----------|---------|----------|-----------------|----------|---------|----------|
| Existing | 122,340 | 76,862 | 634 | 490 | 122,974 | 77,352 |
| Increase | 19,860 | 76,256 | <u>—</u> 290 | <u> </u> | 19,570 | 76,165 |

Compared with the average collections of the five years before 1841, the rental under the revised rates was 138 per cent higher; compared with the average collections of the eleven years ending 1852 it was 119 percent higher; compared with those of the ten years ending 1862 it was 101 per cent higher; and compared with those of the ten years ending 1872 it was 96 per cent higher. The largest increase was in the village of Bhavdi which was raised 228 per cent. Of this amount the increase in the occupied arable land hitherto not shown in the accounts was 90 per cent. In Dhankauri the increase was 175 per cent and in Vadgaon Sheri 177 per cent. [Lieut.-Col. Waddington, Survey Superintendent, 840 of 30th Nov. 1872. Bom-Gov. Sel. CLL 400-414.]

Should these proposed rates appear too high and the increase in rental be not in accord with the Government policy of moderation, the Survey Superintendent submitted a modified scale to be substituted in their place. He reduced the highest dry-crop acre rates of the first and second classes by 1s. (8 as.) and the remaining classes by 6d. (4 as.) each except in one or two cases in which the reduction made was 1s. (8 as.). The effect of the changes was to lower the proposed assessment on dry-crop land from £15,209 to £13,679 (Rs. 1,52,090-Rs. 1,36,790) and the total assessment from £15,884 to £14,354 (Rs. 1,58,840 - Rs. 1,43,540). This was an increase of 79 per cent on the preceding year's collections in eighty-one villages; of this increase 16 per cent was due to the greater area brought under assessment, leaving 63 per cent as the increase caused by the new rates. The Survey Commissioner suggested a highest rice acre rate of 10s. (Rs. 5) instead of 12s. (Rs. 6), and made some changes in the grouping of villages. According to his proposals the increase in the total rental was reduced to about 75 per cent. Government sanctioned the proposals of the Survey Commissioner. [Gov. Res. 3516 of 20th June 1873. Bom. GOV. Sel. CLI. 465 - 469.]

As the Government of India intimated their satisfaction that the rates originally proposed by the Survey Superintendent had been modified, and expressed their readiness to make further reductions, should reductions appear necessary, the Survey Superintendent made some, further changes in individual villages and brought the total assessment on the cultivated lands of the eighty-four villages to £13,419 (Rs. 1,34,190) showing an increase of 67 per cent on the preceding year's payments. The average dry-crop acre rate was 1s. 9½d. (14 1/6 as.) channel water rate 4s. 5½d. (Rs. 2 as. 3 5/12) and rice rate 5s. 11 5/8d.(Rs.2 as. 15¾). [Lieut-Col. Waddington, Survey Superintendent, 824 of 27th Aug. 1873 and 314 of 18th April 1874. Bom. Gov. Sel. CLI. 471 -473,485.]

The following statement shows for the eighty-four Haveli villages under the revision settlement originally proposed by 'the Superintendent of Survey, the revised settlement advocated in the transmitting report of the Survey Commissioner and sanctioned by Government in June 1873, and the settlement finally proposed by the Survey

Superintendent [Bom. Gov. Sel. CLI. 476.] in September 1873. Government sanctioned the final proposals in October 1873: [Gov. Res. 5495 of 3rd Oct. 1873. Bom. Gov. Sel. CLI. 479.]

| Eighty-four | Haveli | Villages . | Settlement | 1873 |
|---------------|--------|------------|----------------|-------|
| Digitity jour | IIuvcu | villages. | Deliteriterit, | 10/5. |

| Former 1871-72. | Proposed 1872-73. | Increase. |
|-----------------|-------------------|-----------|
| Rs. | Rs. | Per cent. |
| 80,965 | 1,58,836 | 96 |
| 80,965 | 1,43,544 | 77 |
| 80,965 | 1,34,189 | 66 |

1873-74.

In 1873-74 the rainfall was 14 inches at Indapur, 32 at Poona, 13 at Junnar, and 68 at Khadkala. Except in Maval, Purandhar, and the late crop part of Indapur, the rainfall was not favourable either for the early or for the late harvest. In the west the early crops were good in Maval and in the south-west and north of Haveli, and fair in Junnar and Khed. In Mulshi insufficient rainfall in the early part of the season, and an excessive fall near the close caused much damage. In the east the early crop was fair in Purandhar, middling in Sirur, and indifferent in Bhimthadi and Indapur where the outturn was very trifling. The late harvest was good in Purandhar, fair in Indapur, and middling in the rest of the east. Public health was generally good. Slight cattle disease was present in MaVal, Junnar, Haveli, and Khed. [Rev. Comr. S. D. 5026 of 29th Dec. 1873.] Tillage rose from 1,848,831 to 1,901,205 acres, collections fell from £112,689 to £99,117 (Rs.11,26,890-Rs. 9,91,170), £17,796 (Rs. 1,77,960) were remitted, and £9125 (Rs. 91,250) left outstanding. At Indapur the rupee price of Indian millet fell from about 28 to 48 pounds (14- 24 shers).

Supa, 1873-74.

In 1873-74 the revised survey settlement was introduced into a group of thirty-nine villages settled in 1843-44. These villages formerly belonged to the Supa petty division of Purandhar. Since the first settlement in 1843-44 thirty of these villages had been handed to Bhimthadi and nine to Purandhar. The country sloped southwards in a waving plain watered by the Karha and other streams none of which flowed throughout the hot weather. In capabilities and climate these villages differed little from each other, except that those lying along the Nira had a larger proportion of deep black soil. The early crops were *bajri*, *math*, and *mug*; the only late crop was *jvari* among which a good deal of *kardai* was sown broadcast. In the northern and eastern villages the late crops, and in the western and southern villages the early crops, predominated. Except in a few villages cultivation was careless. The fields were overrun with weeds; the land was not ploughed

more than once in three or four years; and the use of manure on dry crop lands, except to a limited extent by the folding of sheep, of which great numbers were reared, was apparently unknown. The garden lands, which were almost exclusively under wells, were by no means of a high class. Sugarcane was grown in the few places which had a twelve month's water-supply. The usual garden crops were wheat, gram, vegetables, and *jvari*; of these *jvari* was a special favourite under inferior wells. As regards communication and markets considerable changes had taken place since the former settlement in 1843. At that time, of the four markets which gave Supa an advantage over Indapur and Kurkumb, three, Wai Bhor and Satara, were thirty miles across the country from the nearest part of the group and more than twice as far from the most distant; while the fourth, Sasvad, was not less than twenty miles from the nearest point. By the new roads from the Nira bridge to the railway station at Kedgaon, from Baramati to Patas, and from Satara to Poona by the Diva and Katraj passes, many of these villages had been brought within a day's march of the railway. Poona, which was still as formerly the great market for produce, was more accessible than from Indapur, and not much less accessible than from Kurkumb. The town of Supa itself was only ten miles from the Kedgaon station. The local markets were Baramati, Supa, Patas, and Jejuri, of which Baramati was the most important especially as a cattle market.

During the survey lease the Supa price of *jvari* rose from about 80 pounds (40 *shers*) the rupee in the first ten years to about 84 pounds (17 *shers*) the rupee in the last ten years of the lease that is an increase of 135 per cent. The corresponding increase in the price of *bajri* was from about 68 to 28 pounds (34-14 *shers*) or 143 per cent. [The details are:

Supa Produce Rupee Prices, 1844-1873.

| YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. | YEAR. | Jvari. | Bajri. |
|-------|--------|--------|-------|--------|--------|-------|--------|--------|
| | Shers. | Shers. | | Shers. | Shers. | | Shers. | Shers. |
| 1844 | 44.7 | 36.5 | 1854 | 25 | 23.62 | 1864 | 12.12 | 10.25 |
| 1845 | 25.25 | 23.25 | 1855 | 30.75 | 28 | 1865 | 17.50 | 11.75 |
| 1846 | 15.62 | 15.25 | 1856 | 22.5 | 20 | 1866 | 13.87 | 14 |
| 1847 | 35.75 | 30 | 1857 | 28.5 | 24.25 | 1867 | 14 | 13 |
| 1848 | 60.5 | 50.25 | 1858 | 26 | 21.1 | 1868 | 32 | 21.5 |
| 1849 | 64 | 52 | 1859 | 38.5 | 32 | 1869 | 13.5 | 13.5 |
| 1850 | 32 | 29.5 | 1860 | 36 | 26.5 | 1870 | 18.5 | 15.75 |
| 1851 | 36 | 29.25 | 1861 | 28.5 | 22 | 1871 | 16.5 | 14.12 |
| 1852 | 39.5 | 38 | 1862 | 19 | 15 | 1872 | 11.5 | 11 |
| 1853 | 53.5 | 40 | 1863 | 13.5 | 10 | 1873 | 26 | 20 |

Bom, Gov. Sel. CLL. 516.]

At the introduction of the 1843 settlement the Supa group was passing from a state of great depression to one of comparative prosperity. This was due to the revision of assessment carried out some years before by Lieutenant Shortrede. Under Lieutenant Shortrede's rates the assessment which had been fixed by the former survey at £12,270 (Rs. 1,22,700) on thirty-seven villages was reduced to £10,140 (Rs. 1,01,400) on 39½ villages. In spite of this reduction the average yearly collections, during the seven years (1836-1842) after the introduction of Lieutenant Shortrede's modified rates, were only £3498 (Rs. 34,9S0) of a total assessment on Government lands of £8850 (Rs. 88,500) or less than 40 per cent; and, though cultivation spread from 40,696 acres in 1836 to 111,768 acres in 1842, there was a progressive increase in remissions. No less than £5000 (Rs. 50,000) of a total of £7400 (Rs. 74,000) of remissions were allowed during the last two years (1841-42) of the settlement. The fixed survey settlement for thirty years was introduced in 1843, the new rates being the same as in Kurkumb or ten per cent higher than Indapur. During the first year (1843-44) of this thirty years' settlement, of a total assessed area of 141,310 acres, 26,302 arable acres were waste. In the next year the arable waste was reduced to 17,191 acres, in the succeeding year to 14,146, and in 1847 it had fallen to 8690 acres. From this time until 1852 the arable waste gradually increased until in 1852 it amounted to nearly 15,000 acres. The collections varied from £4206 (Rs. 42,060) in 1844-45 to £5310 (Rs. 53,100) in 1847-48 and £5194 (Rs. 51,940) in 1852-53. Large remissions were granted in two of the first ten years, £417 (Rs.4170) in 1844-45 and £828 (Rs. 8280) in 1850-51. The average collections during the ten years ending 1853 were £4886 (Rs. 48,860) and remissions £171 (Rs. 1710), and the area under tillage was 126,604 acres. Between 1853 and 1858 the arable waste was reduced to 1000 acres; in 1862 it had risen to 1787 acres. The collections in 1862-63 were £5728 (Rs. 57,280). The average area under cultivation was 139,966 acres. During the ten years ending 1873 the arable waste averaged 1843 acres, and the occupied area 142,225 acres, but the collections amounted to £5550 (Rs. 55,500). The fall in average revenue was due to the very large remission allowed in 1866-67, which amounted to £1859 (Rs. 18,590) or onethird of the entire assessment. With this exception the remissions since 1854 were nominal. The following statement gives the average tillage and collections during the survey lease: [The tillage area rose from 115,000 acres in 1843-44 to 133,000 acres in 1847-48 and fell to 123,000 in 1849-50. After 1849-50 it rose to a little over 140,000 in 1857-58 and stood at about 142,000 during the remaining fifteen years. The remissions were about Es. 5000 in 1844-45, Rs. 8000 in 1850-51, and Rs. 18,000 in 1866-67. In other years there were little or no remissions. The collections rose from Rs. 44,000 in 1843-44 to Rs. 54.000 in 1847-48 and fell to Rs. 44,000 in 1850-51. They then rose, to Ks. 56,000 in 1855-56 and stood at about Rs. 57,000 during the next ten years. In 1866-67 they were Rs. 39,000 and again stood at about Rs. 57,000 during the next six years. Survey Diagram. Bom. Gov. Sel. CLI. 514.]

Supa Tillage and Revenue, 1843-1873.

| | Area. | Rental. | Area. | Rental. | Area. | Rental. | | |
|---------------|---------|---------|--------|---------|---------|---------|------|--------|
| | Acres. | Rs. | | Rs. | | Rs. | Rs. | Rs. |
| 1843- 1853 | 126,604 | 50,564 | 15,190 | 6162 | 141,794 | 56,726 | 1707 | 48,856 |
| 1853- 1863 | 139,966 | 56,498 | 2825 | 1212 | 142,791 | 57,710 | 416 | 56,082 |
| 1863- 1873 | 142,225 | 57,390 | 1843 | 612 | 144,068 | 58,002 | 1889 | 55,500 |

During the survey lease population increased from 22,795 in 1843 to 32,722 in 1873 or 43.5 per cent; houses from 3804 to 4304 or 13 per cent; wells from 1003 to 1720 or 71 per cent; carts from 191 to 578 or 202 per cent; ploughs from 1110 to 1457 or 31.2 per cent; buffaloes from 1252 to 1654 or 32 per cent; cows from 9946 to 11,649 or 17 per cent; bullocks, draught and plough, from 12,907 to 14,256 or 10.4 per cent; and sheep and goats from 18,934 to 24,663 or 30.3 per cent. Horses showed a fall from 1150 to 844 or 26.6 per cent. Of the new wells 44 were built in the first ten years, 148 in the second ten years, and 225 in the last ten years of the survey lease.

The condition of the people was on the whole good. Few of them were hopelessly involved and every village had some families who were free from debt. At Pandara there were many stacks of straw two years old still undisposed of, though the third year's crop was in the ground and ready to cut. Many of the villages especially the larger ones showed signs of having once been more populous. In numerous instances this apparent fall in the population and ruined appearance of the larger villages was owing to the fact that landholders whose fields lay far from the village site, had built themselves huts and lived there permanently, allowing their village houses to go to ruin. Thus the apparent desolation was in many cases a sign of increased security of life and property.

It was a common practice in this as in other sub-divisions for the cultivators to sell their crops in a lump or *khoti* while still unripe In 1872 in the Supa group the prices realized varied from 31 times to a little less than 1½ times the new assessment. The highest sum realised was from the poorest field the classification of which was only 1½ *annas*. The total collections in twenty cases of lump or *khoti* sales were £217 16s. (Rs. 2178) on which the proposed assessment came to £37 (Rs. 370) or about one-sixth. This did not represent the gross produce of the land, since the middle-man must, besides the element of risk, cover the expenses of watching, reaping, and harvesting. [Bom. Gov. Sel. CLL 512.]

Thirty-nine villages were arranged in four classes with highest drycrop acre rates varying from 2s. 9d. to 2s. (Rs. 1 3/8 -1). Two villages close to the road from Satara by the Nira bridge to Poona were placed in the first class and charged a rate of 2s. 9d. (Rs. 1?); twelve villages along the western boundary and on the road to the Kedgaon station were

placed in the second class and charged a rate of 2s. 6d. (Rs. 1¹/₄); twelve villages to the east and south of the preceding class were placed in the third class and charged a rate of 2s. 3d. (Rs. 1?); and thirteen villages in the south-east of this revision survey group were placed in the fourth class and charged a rate of 2 s. (Re. 1). No rice was grown in any of these villages and the channel irrigation was very poor. The proposed highest channel water acre rate was 4s. (Rs. 2). Compared with the preceding year's collections the revised survey rental showed an increase from £5746 to £8171 (Rs.57,460-Rs. 81,710) or 42 per cent. The following statement shows the effect of the survey: [Lt.-Col. Waddington, Surv. Supt. 846 of 5th Sept. 1873. Bom. Gov. Sel. CLI, 507-521.]

Supa Revision Settlement, 1873.

| CETEL EMENIT | OCCU | PIED. | UNOCO | CUPIED. | TOTAL. | |
|--------------|---------|--------|--------|---------|---------|---------|
| SETTLEMENT. | Area. | Rental | Area. | Rental. | Area. | Rental. |
| | Acres. | Rs. | Acres. | Rs. | Acres. | Rs. |
| Proposed | 156,828 | 81,713 | 1558 | 230 | 158,386 | 81,943 |
| Existing | 142,235 | 57,461 | 1830 | 443 | 144,065 | 57,904 |
| Increase | 14,593 | 24,252 | -272 | -213 | 14,321 | 24,039 |

The Survey Commissioner proposed a few modifications. He removed the first class, and transferred a few villages from the second to the third class, and from the third to the fourth class. Government sanctioned the settlement as modified by the Survey Commissioner. [Gov. Res. 6377 of 22nd Nov. 1873, Bom. Gov. Sel. CLL 552 - 551.]

1874-75.

In 1874-75 the rainfall was 27 inches at Indapur, 38 at Poona, 25 at Junnar, and 92 at Khadkala. The season was on the whole favourable both for early and late crops. In some villages of Haveli, Indapur, Bhimthadi, and Khed the early crops were slightly damaged by excessive rain in September and October. In a few villages of Junnar considerable damage was caused by insects called *naktodaa*. Public health was generally good. Slight cattle disease was present in some sub-divisions. [Rev. Comr. S. D. 4718 of 29th Dec. 1874] Tillage fell from 1,901,205 to 1,884,679 acres, collections rose from £99,117 to £118,333 (Rs.9,91,170-Rs. 11,83,330), £4061 (Rs. 40,610) were remitted, and £720 (Rs. 7200) left outstanding. At Indapur the rupee price of Indian millet fell from about 40 to 60 pounds (24-30 *shers*).

REVISED SETTLEMENT REDUCED, 1874.

About the close of 1874 a fall in the price of grain [Indian millet rupee prices were in Bhimthadi 14½ shers in 1868-69, 19½ in 1869-70, 17½ in 1870-71, 12 in 1871-72, 22½

in 1872-73, 30 in 1873-74, 39 in 1874-75, and 36 in 1875-76; in Indapur 15 in 1871-72, 17 in 1872-73, 30 in 1873-74, 46 in 1874-75, and 37 in 1875-76. Collector of Poona, 4376 of 7th June 1884. The Indapur figures here given differ from those given in the statement on page 512. led Government to set limits to the amounts by which the former rates might be enhanced and to reduce some of the enhanced settlements which had been introduced into Poona. It was right that Government should take advantage of the discovery of land held without payment, should correct mistakes in measuring and in classing, should share with the people the benefits derived from better roads and from the opening of railways, and should receive a share of the profit which the rise in produce prices caused to the landholders. As it no longer seemed probable that the high prices which ruled during the ten years ending 1872 would continue, Government ordered that the increase in revenue in any village group should never be more than thirty-three per cent; that the increase in a single village should never be more than sixty-six per cent, and that the increase in an individual rental should never be more than 100 per cent. To bring the amounts of enhancement, which had been sanctioned in some of the revised portions of Poona, The details (Bom. Gov. Sel. CLI, 174) are:

Poona Survey Settlements, 1836 - 1866 and 1866 -1874.

| SUB- DIVISION. | ORIGINAL SETTLEMENT. | | | | REVISED SETTLEMENT. | | | | |
|-------------------|----------------------|---------|--------|----|---------------------|---------|-----------------------|----|-----------|
| | Arable. | Rental. | Averag | _ | Arable. | Rental. | Average Acre Rate. | | INCREASE. |
| | Acres. | Rs. | A. | P. | Acres. | Bs. | A. | P. | Percent. |
| Indapur | 238,135 | 81,391 | 5 | 5 | 270,076 | 124,700 | 7 | 4 | 53 |
| Bhimthadi | 190,410 | 86,464 | 7 | 3 | 212,703 | 146,596 | 11 | 0 | 69 |
| Haveli | 127,610 | 80,965 | 10 | 2 | 146,745 | 134,768 | 14 | 7 | 66 |
| Pabal | 161,240 | 102,228 | 10 | 1 | 192,411 | 152,108 | 12 | 7 | 48 |
| Supa | 147,244 | 69,926 | 6 | 6 | 159,227 | 78,788 | 7 | 11 | 31 |

1

into accord with these rules, Government proposed that the necessary changes should be made on the following principles. The highest rates in the group were to be so reduced as to bring the increase in the total revenue of the group within the limits of fifty per cent. When this was done, any case in which the increase in a village was still above 75 per cent, or in an individual holding above 100 per cent, should be reported for orders with distinct recommendations from the survey officers whether further changes were necessary, and if so how they should be made. Government hoped that in groups originally settled after 1848, little or no field operations would be required, and that the revision of the assessment by a mere readjustment of the highest rates would be found to

be sufficient. [Gov. Res. 5739 of 29th October 1874 and 4506 of 10th August 1875, Bom. Gov. Sel- CL. 133-138 and CLI. 174-179.]

In accordance with these instructions in 1875-76 the survey officers made proposals for reducing the revised assessment of Indapur, Bhimthadi, Haveli, Pabal, and Supa. The actual settlements finally sanctioned by Government are given below, showing their percentage increase on the original thirty years' settlements introduced between 1836 and 1844: [Bombay Gov. Sel. CLI. The highest dry-crop acre rates finally sanctioned were Indapur, Rs. 1½, Rs. 1 7/8; Bhimthadi, Rs. 1 5/8, Rs. 1¾, Rs. 1½, Rs. 1; Haveli Rs. 3¼, Rs. 2¾, Rs. 2½, Rs. 2¼, Rs. 2, Rs. 1¾, Rs. 1 5/8, Rs. 1 3/8; Pabal Rs. 2¾, Rs. 2, Rs. 1¾, Rs. 1 5/8, Rs. 1 1½, Rs. 1½, Rs. 1⅓, Rs. 1⅓, Re. 1.]

Poona Revised Survey Settlements Seduced, 1876.

| SUB- DIVISION. | | SETTLEMENTS 1836-1844. | REDUCED REVISION SETTLEMENTS, 1876-76. | | | | |
|-------------------|-----------|---------------------------|---|-------------------------------|--------------------------------|----|--|
| | VILLAGES. | Amount. | Amount. | Increase over 1836- 44. | Average Dry-crop Acre Rate. | | |
| | | | Rs. | Per Cent. | As. | p. | |
| Indapur | 78 | 81,184 | 1,11,866 | 38 | 6 | 8 | |
| Bhimthadi | 48 | 74,222 | 1,03,982 | 40 | 8 | 9 | |
| Haveli | 83 | 80,965 | 1,13,773 | 41 | 11 | 10 | |
| Pabal | 59 | 1,02,228 | 1,39,479 | 36 | 11 | 2 | |
| Supa | 39 | 57,461 | 72,303 | 26 | | | |

1875-76.

In 1875-76 the rainfall was 21 inches at Indapur, 38 at Poona, 34 at Junnar, and 116 at Khadkala, a full supply, but, as the falls were ill-timed, the season was unfavourable. An excessive fall, when the early crops were still young, did so much damage that many tracts had to be resown. In a few villages of Haveli and Sirur the crops were slightly injured by locusts. The rice in Maval suffered from early floods and later from want of rain. The outturn of the early crops was not more than ten-sixteenths to twelve-sixteenths; in many places it was much less. In the eastern or late crop parts the rainfall was short, and the crops were far below the average. In Indapur, Bhimthadi, and south Sirur *jvari* withered for want of rain, and in many places did not grow more than eighteen inches high. The late harvest was less than a half crop and the outturn of cotton was not more than a fourth. The district suffered from a severe outbreak of cholera which began in the hot weather and continued until October (1875). More than 4000 seizures were fatal.

About 1000 head of cattle died from disease. [Rev. Comr. S. D. 3876 of 31st Dec. 1875.] Tillage fell from 1,884,679 to 1,875,669 acres and collections from £118,333 to £112,673 (Rs. 11,83,330-Rs. 11,26,730), £3480 (Rs. 34,800) were remitted, and £703 (Rs. 7030) left outstanding. At Indapur the rupee price of Indian millet rose from about 60 to 56 pounds (30 - 28 *shers*).

1876-77.

In 1876-77 the rainfall was 5 inches at Indapur, 15 at Poona, 17 at Junnar, and 77 at Khadkala. In the east 1876-77 was a year of famine. The rainfall was very scanty and the crops failed. The Maval rice suffered considerably. In the west of Junnar Khed and Haveli the early crops were fair perhaps six to seven-sixteenths. In the east of these subdivisions and in Indapur and Bhimthadi, except in watered land no early crops were grown. Late crops were sown in parts of Maval, Haveli, Sirur, and Purandhar, but none were sown in Indapur or in Bhimthadi. All over the district the late harvest was an almost complete failure. Great distress prevailed and relief works had to be provided. A summary of the 1876-77 famine details is given under Agriculture Chap. IV.] Public health on the whole was good. Cholera appeared in some parts and caused 651 deaths. Cattle disease prevailed slightly. In the east many cattle died of starvation and thousands were driven to the west for grazing. [Rev. Comr. S. D. 945 of 27th Feb. 1877.] Tillage fell from 1,875.669 to 1,864,475 acres and collections from £112,673 to £70,321 (Rs. 11,26,730-Rs. 7,03,210), £174 (Rs. 1740) were remitted, and £45,683 (Rs. 4,56,830) left outstanding. At Indapur the rupee price of Indian millet rose from about 56 to 38 pounds (28-19 shers).

1877-78.

In 1877-78 the rainfall was 28 inches at Indapur, 20 at Poona, 17 at Junnar, and 51 at Khadkala. In the east and south-east a long break damaged the early crops but in the west the early harvest was above the average. The late crops were much injured by blight and in some places towards the east they entirely failed. Fever was very prevalent, and there were 3196 deaths from cholera. [Bom. Pres. Genl. Adm. Rep. for 1877-78, 76-78.] Tillage rose from 1,864,475 to 1,868,193 acres and collections from £70,321 to £110,148 (Rs. 7,03,210 - Rs. 11,01,480), £135 (Rs. 1350) were remitted, and £6866 (Rs. 68,660) left outstanding. At Indapur the rupee price of Indian millet rose from about 38 to 18 pounds (19- 9 *shers*).

1878-79.

In 1878-79 the rainfall was 29 inches at Indapur, 33 at Poona, 39 at Junnar, and 73 at Khadkala. In the west the early crops were good; in the east they were almost destroyed by untimely rain and to some extent by locusts. In the west the late harvest was an average one; in the east it was almost destroyed by rats. Numbers of the poorer husbandmen took work on the Nira Canal. Public health was generally good. [Bom. Pres. Genl. Adm. Rep. for 1878-79, 78-79.] Tillage fell from 1,868,193 to 1,861,631 acres and collections from £110,148 to £104,030 (Rs.11,01,480-Rs. 10,40,300),£25 (Rs.250) were

remitted,and £10,864 (Rs.1,08,640) left outstanding. At Indapur the rupee price of Indian millet fell from about 18 to 20 pounds (9 -10 *shers*).

REVISION SURVEY. Purandhar, 1879.

In 1878-79 revised assessments were introduced into thirty-five Government and one reversionary or dumdla village, and survey rates were for the first time introduced into four reversionary or dumala villages in Purandhar. Most of these villages had belonged to the Sasvad mamlatdar's division of Purandhar which was settled in 1847. Of the thirtyfive Government villages the revised settlement was proposed for a group of seventeen villages in April 1878 and for a group of eighteen Government villages in February 1879. [Purandhar formerly included two divisions, the *subha* or mamlatdar's charge with the head-quarters at Sasvad and the *peta* or mahalkari's charge with the headquarters at Supa. The Supa group which was settled in 1844 included fifty-nine villages, forty-five Government and fourteen alienated. The Sasvad group which was settled in 1847 included seventy villages, thirty-two Government and thirty-eight alienated. In 1861-62 the office of mahalkari was abolished and the villages of his division were included within the limits of the mamlatdar's division. In the following year 1862-63 eight villages were transferred from the adjoining sub-division of Haveli and finally in 1866-67 fortyfive villages, thirty-seven Government and eight alienated were made over to the Bhimthadi sub-division. These changes left for Purandhar in April 1878 ninety-two villages, sixty-seven Government and twenty-five alienated.] The Purandhar sub-division was bounded on the north and north-east by Haveli and Bhimthadi which were separated from Purandhar by the Bhuleshvar range which rose about 1000 feet from the plain. Purandhar was bounded on the east by Bhimthadi, on the south by the river Nira which separated Poona from Satara, and on the west by the Pant Sachiv's territory and a portion of Haveli. The rainfall in the Purandhar sub-division varied from 1462 inches in 1872-73 to 31.26 inches in 1874-75 and averaged 2024 inches. [The details are:

Purandhar Rainfall, 1871 -1877.

| YEAR. | Purandhar. | Pitas. | Baramati | Haveli. |
|---------|------------|---------|----------|---------|
| | Inches. | Inches. | Inches. | Inches. |
| 1871-72 | 17.77 | 12.60 | 12.30 | 19.88 |
| 1872-73 | 14.62 | 19.10 | 20.77 | 20.20 |
| 1873-74 | 17.77 | 14.18 | 10.17 | 26.80 |
| 1874-75 | 31.26 | 25.84 | 26.31 | 37.75 |
| 1875-76 | 22.50 | 12.28 | 9.61 | 37.43 |
| 1876-77 | 17.54 | 6.0 | 7.54 | 14.90 |
| Average | 20.24 | 15.0 | 14.45 | 26.16 |

The husbandry in Purandhar did not differ from that in the neighbouring sub-divisions except that the land was oftener ploughed, the light soils yearly and the heavier black soils once in two years. The landholders showed more energy in the cultivation of their fields. The sub-divisions of land property, as a rule, were minute and its market value was high. Manure was applied to the drycrop soils only when the farmer found he had it to spare. Watered lands when made ready for sugarcane generally got as much as fifty cartloads the acre, while twenty to thirty cart loads the acre sufficed for ordinary garden crops. The manure consisted of the usual farm-yard refuse or sheep droppings. In most of the first group of nineteen villages, seventeen Government and two alienated, it was customary to raise a second crop of grain after bajri or other kharif crops had been cleared. According to Mr. Whitcombe the classing assistant who reported on these nineteen villages, the sugar manufactured in this sub-division was much prized for its firmness which enabled it to stand travelling. It fetched about 4s. (Rs. 2) the palla of 120 shers more than the jagri manufactured elsewhere. The Purandhar sugarcane had the peculiarity of being kept eighteen months on the ground. The people said that by keeping it so much longer the sugar-making power of the juice was greatly increased. The cane was planted in May or June and cut in November or December of the following year. The early crops were 51.5 per cent and the late crops, including 14 per cent of fallow land, were 48.5 per cent. The chief crop was bajri 48 per cent and the next was jvari 27.2 per cent. The 1875-76 details for seventeen Government and one alienated village were: Early or kharif, bajri 48, per cent, rice one per cent, mathi 0.4, hulga 0.3, udid 0.1, and miscellaneous 1.7, total 51.5. Late or rabi. jvari 27.2, wheat 2, sugarcane 1.1, gram 0.7, miscellaneous 3.5, waste or fallow 14, total 48.5.]

During the term of the survey lease road communications had been greatly improved. In 1847 the Poona-Satara road by the Bapdev pass was the only made road. This pass was very steep and little used by carts. Pack bullocks brought most of the surplus produce to the Poona market. In 1878 the Bapdev pass road was used by local carts as a means of communication from the villages near it to the chief market town of Sasvad. Here the road joined the comparatively new road to Poona over the Diva pass. From Sasvad numerous roads branched, one to Jejuri where it was joined by the main road from the Diva pass. Half-way from the Bapdev pass on the road to Sasvad branched off another road to the fort of Purandhar, but since the completion of the Diva pass road this was not much used. Another road fairly metalled but not bridged, left Sasvad to the south-west, and, after passing through the Safgir pass, joined the main road from Poona to Satara by the Katraj pass. The Katraj pass road,' after passing through the lands of some of the south-western villages of Purandhar, crossed the Nira river not far from the market town of Kikvi. Another unbridged made road left Sasvad on the south and crossed the Pimpla pass close to the village of Parincha and thus on to the river Nira not far from the village of Tondla. Another road practicable for carts left the main road from the Diva pass, close to the village of Belsar, and crossed the Bor pass to the Urali railway station. Besides these metalled roads, during the 1876-77 famine three other fair weather roads were laid out as relief works. One of them joins Sasvad with Supa, and the other two start from Jejuri and pass east. Where thirty years before there was only one made road, in 1878

there were numerous lines of communication affording every facility for the conveyance of surplus produce to the different large markets the chief of which was Poona. The chief manufactures were cotton cloth or *lugdis*, blankets or *kamblis*, and bangles. One hundred looms were devoted to the weaving of *lugdis* and twenty-one to the making of *kamblis*. The best of both were taken to the Poona market where they found a ready sale. The prices for *lugdis* ranged from 5s. to £1 (Rs. 24-10), and the highest price that the best class of *kamblis* fetched was 6s. (Rs. 3). At the village of Mandar coarse glass bangles were made costing about 6d. (4 as.) the hundred. The local markets were at Sasvad, Vala, Parincha, and Kikvi. Except Sasvad they were of no great importance. Almost the whole of the surplus field produce went to Poona.

During the thirty years ending 1877 the Sasvad produce prices had risen from an average of 85 pounds of jvari the rupee during the ten years ending 1857 to 42 pounds during the ten years ending 1867 or 102 per cent. The average for the next ten years (1867-1877) 44 pounds showed a fall of 5 per cent compared with the ten years ending 1867 and a rise of 93 per cent compared with the ten years ending 1857. The corresponding figures for bajri were 70 pound's in the ten years ending 1857, 36 in the ten years ending 1867, and 86 in the ten years ending 1877; for wheat 58 pounds, 29 pounds, and 27 pounds; for gram 61 pounds, 28 pounds, and 29 pounds; and for rice 36 pounds, 20 pounds, and 20 pounds. Thus, as regards the three chief grains *jvari bajri* and wheat, the landholder was nearly 100 per cent better off in the last ten than in the first ten years of the 1847 settlement. Compared with those of the second ten years (1857-1867) the average prices during the last ten years (1867-1877) showed a slight fall. But the high average of the ten years ending 1867 was chiefly owing to the extreme clearness of grain between 1861 and 1866. In 1862 the price was higher even than in the 1877 famine. Compared with the ten years before the 1847 settlement the average waste acres in fifteen Government villages during the ten years ending 1857 showed a fall from 2046 to 1148, in the next ten years to 373, and in the last ten years ending 1877 to 214 acres. Average remissions fell from £230 (Rs. 2300) in the ten years before the settlement to £8 (Es. 80) in the first ten years and to 4s. (Rs. 2) in the second ten years. In the last ten years there were no remissions. The occupied acres of Government and alienated land rose from 19,834 in the ten years ending 1847 to 40,209 in the ten years ending 1857, [Col. Laughton has shown that the apparently doubling of the area held for tillage during the first ten years is partly due to the conversion of bighas into acres at the rate of 3/4ths of an acre equal to one biyha, to 41,225 acres in the ten years ending 1867, and to 41,420 acres in the ten years ending 1877. The average collections on these lands did not show much rise, the amounts being £1792 (Rs. 17,920) during the ten years (1837-1847) before the settlement, £1693 (Rs. 16,930) during the first ten years, £1813 (Rs. 18,130) during the second ten years (1857-1867), and £1839 (Rs. 18,390) in the last ten years ending 1877. The following tabular statement gives the results:

Purandhar Tillage and Revenue, 1837-1877.

| YEAR. | Government Villages. | Tillage. | Waste. | Remissions. | Outstandings. | Collections. |
|-------|----------------------|----------|--------|-------------|---------------|--------------|
|-------|----------------------|----------|--------|-------------|---------------|--------------|

| | | Acres. | Acres. | Rs. | Rs. | Rs. |
|-----------|----|--------|--------|------|-----|--------|
| 1837-1847 | 15 | 19,834 | 2046 | 2300 | | 17,924 |
| 1847-1857 | 15 | 40,209 | 1148 | 81 | 352 | 16,932 |
| 1857-1867 | 15 | 41,225 | 373 | 2 | 1 | 18,130 |
| 1867-1877 | 15 | 41,420 | 214 | | 521 | 18,390 |

According to Colonel Laughton there was a gradual and steady rise in collections until 1874 when the receipts reached within £1 2s. (Rs. 11) of the total survey rental. During the thirty years' lease in the fifteen Government villages settled in 1847-48, population increased from 15,482 in 1847-48 to 18,895 in 1876-77 or 22 per cent, and the density to the square mile from 184 to 224; flat roofed and tiled houses increased from 2239 to 2680 or 19.7 per cent and thatched houses from 259 to 298 or 15.1 per cent; ploughs from 555 to 757 or 36.4 per cent; and carts from 60 to 315 or 425 per cent. The value of land was very high. Though the information cannot be considered more than a rough indication of the true value it is worthy of note that in fifteen mortgages sums ranging from eight to 420 times and in seven sales sums ranging from seven to 389 times the yearly land assessment were realized. [Col. Laughton shows that these returns may mislead because the sums entered as paid may include the accumulated interest of years of outstanding accounts. Subletting was common but nowhere for cash payments. It was chiefly on the ardhali that is half-share plan, by which the holder who paid the Government assessment exacted half of, the produce from the tenant; and supplied half of the seed, and, in the case of garden land, half of the cost of ropes and of manure. Under the revision survey the seventeen Government villages were arranged in four classes with highest dry-crop acre rates of 3s. 6d., 3s. 3d., 3s., and 2s. 9d (Rs. 1³4, 1?, 1¹/₂, and 1?). The effect of the proposed settlement was an increase of 45.7 per cent and a rise in the average acre rate from 1s. $\frac{1}{4}d$. to 1s. 5? d. (8-11¹¹/12 as.). The details are :

Purandhar Proposed Settlement, 1878.

| | | GOV | /ERNMEN | T OCCUF | PIED LAN | D. | ніснест | |
|--------|------------------------------|--------|---------|---------|----------|-----------------------------|---------|----|
| CLASS. | GOVERN- MENT VILLAGES. | Former | Survey. | Revi | ey. | HIGHEST DRY CROP ACRE | | |
| | | Area. | Rental. | Area. | Rental. | In crease. | RATE. | |
| | | Acres. | Rs. | Acres. | Rs. | Percent | Rs. | a. |
| I. | 1 | 3613 | 3267 | 3560 | 6715 | 75.5 | 1 | 12 |
| II. | 2 | 1701 | 1586 | 1686 | 2168 | 36.7 | 1 | 10 |

| III. | 10 | 23,252 | 10,633 | 23,510 | 15,188 | 42.8 | 1 | 8 |
|-------|----|--------|--------|--------|--------|------|---|---|
| IV. | 4 | 8023 | 3257 | 8001 | 4216 | 29.4 | 1 | 6 |
| Total | 17 | 36,589 | 18,733 | 36,757 | 27,287 | 45.7 | | |

The Government unoccupied waste was 133 acres assessed at £2 18s. (Rs. 29) or an average acre rate of 5½d. (3½ as.). [Col. Loughton, Survey Supt. 324 of 9th April 1878.] Government ordered that the proposed rates might be adopted with such modifications as the Survey Commissioner might think necessary, reporting them for the sanction of Government. [Gov. Res. 2969 of 11th June 1878; and Col. Anderson, Surv. Comr. 406 of 4th May 1878.] The details of the settlement finally sanctioned are: [Cel. Laughton, Surv. Supt. 119 of 1st Feb. 1879; Col. Anderson, Surv. Comr, 370 of 2nd April 1879; and Gov. Res. 2159 of 23rd April 1879.]

Purandhar Revision Settlement, 1879.

| | | | | DR | Y CR | OP L | AND. | | | |
|--------|------------------------------|---------|---------|-----------|---------------------------|-------|----------|-----------|-------------------|-----|
| | COVEDN | Former. | | | Re | visio | n Survey | 7. | | |
| CLASS. | GOVERN- MENT VILLAGES. | | | Proposed | d. | | | Sanctione | ed. | |
| | , 122, 1325. | Rental. | Rental. | Increase. | Highest Acre Rates. | | Rental. | Increase. | Higl Ac Rat | ere |
| | | Rs. | Rs. | Per Cent | Rs. | a. | Rs. | Per Cent | Rs. | a. |
| I. | 1 | 8257 | 4840 | 48.6 | 1 | 12 | 5114 | 57.0 | 2 | 0 |
| II. | 2 | 1586 | 1963 | 23.8 | 1 | 10 | 2067 | 30.3 | 1 | 14 |
| 111 | 9 | 11 044 | 12.710 | 22.0 | 1 | 8 | 14 220 | 27.4 | 1 | 10 |
| III. | 1 | 11,244 | 13,718 | 22.0 | 1 | 6 | 14,320 | 27.4 | 1 | 10 |
| *** | 1 | 1070 | 1202 | 0.6 | 1 | 8 | 1446 | 12.6 | 1 | 0 |
| IV. | 1 | 1273 | 1382 | 8.6 | 1 | 6 | 1446 | 13.6 | 1 | 8 |
| V. | 2 | 1373 | 1785 | 30.0 | 1 | 6 | 1721 | 25.8 | 1 | 6 |
| Total | 17 | 18,733 | 23,688 | 26.5 | | | 24,668 | 31.7 | | |

The proposed dry-crop rental was increased by £98 (Rs. 980) or 4.14 per cent. The proposed water cess was increased from 15s. to 16s. (Rs. $7\frac{1}{2}$ - 8) and the total rental from

£590 to £625 (Rs. 5900-6250), that is a rise of £35 (Rs. 350) or 5.9 per cent. Taking dry-crop and water rates together the proposed rental was increased by $4\frac{1}{2}$ per cent. Compared with the former survey the sanctioned revision showed an increase of 52.8 per cent.

The lands of the second group of eighteen Government villages were close to or mixed with the lasds of the first group. In climate, husbandry, productions, communications, markets, and manufactures there was no difference. The early crops were 446 per cent of which *bajri* was 34.3 per cent; and the late crops, including 8.2 per cent of waste or fallow, were 55.4 per cent of which 43 per cent were *jvari*. There were ten looms, one for cotton cloth and nine for blankets. During the thirty-one years of the settlement the area of arable waste fell from 5238 in the ten years ending 1847, to 1293 in the ten years ending 1857, to 404 in the ten years ending 1867, to 176 in the ten years ending 1877, and to 4 in 1877-78. During the ten years before the settlement (1837-1847) remissions amounted to £464 (Rs. 4640) which were reduced to £7 (Rs. 70) in the next ten years. Tillage rose from 20,029 acres in the ten years ending 1847 to 41,550 in the ten years ending 1877, and collections from £1816 (Rs. 18,160) in the first ten years of the settlement (1847-1857) to £1961 (Rs. 19,610) in the ten years ending 1877. The details are:

Purandhar Tillage and Revenue, 1837-1878.

| YEAR. | Government Villages. | Tillage Area. (a) | Waste. | Remissions. | Out- stand- ings. | Collections. |
|---------------|-------------------------|----------------------|--------|-------------|-------------------------|--------------|
| | | Acres. | Acres. | Rs. | Rs. | Rs. |
| 1837- 1847 | 18 | 20,029 | 5238 | 4636 | 1380 | 20,525 |
| 1847- 1857 | 18 | 39,926 | 1293 | 67 | 278 | 18,158 |
| 1857- 1867 | 18 | 41,238 | 404 | 1 | 5 | 19,273 |
| 1867- 1877 | 18 | 41,550 | 176 | | 999 | 19,609 |
| 1877-78 | 18 | 41,612 | 4 | | 22 | 19,595 |

(a) Much faith cannot be placed in the return of area before the introduction of the revenue survey. The record of area was always kept in *bighai*, which has been turned into acres at ³/₄ths of an acre to the *bigha*. This is not correct, for the *bigha* varied according to the nature of the soil. Probably in the best black soil the assumed proportion was fair

enough. In the poor or *barad* soils the *bigha* represented three or more acres. - Colonel Laughton, Feb. 1879.

During the first settlement lease population increased from 9451 in 1847-48 to 11,617 in 1877-78 or 229 per cent; flat roofed and tiled houses from 1219 to 1441 or 18.2 per cent: carts from 105 to 232 or 121 per cent; and watering wells from 201 to 275 or 36.8 per cent. Thatched houses decreased from 326 to 250 or 23.3 per cent; farm cattle from 4828 to 3878 or 19.7 per cent; and ploughs from 615 to 505 or 17.9 per cent. Under the revision survey these eighteen Government villages were arranged into six classes with highest dry-crop acre rates varying from 5s. 6d. to 2s. 9d. (Rs. 2³/₄ -1?). The effect of the proposed settlement was an increase of 34.3 per cent exclusive of water cess or 39 per cent inclusive of water-cess. The average acre rate rose from 1s. \(^1/4d\). (8\(^1/6\) as.) to 1s. 4\(^3/4d\). $(11^{1}/6 \text{ as.})$. The considerations which justified the increase were the improvement in communications, in the price of food grains, and in the value of land. There were only fifty-two acres of rice in which a highest acre rate of 16s. (Rs. 8) was proposed, and the actual highest acre rate was 6s. (Rs. 3) and the lowest 10½d. (7 as.). The average acre rate amounted to 4s. 5?d. (Rs. 2 as.3⁷/12); all new rice land was assessed at simple drycrop rates. Garden land was found in every village and amounted to a total of 1435 acres. For the channel-watered portion of this land a highest acre rate of 16s. (Rs. 8), combining soil and water, was proposed. The details of the proposed settlement are:

Purandhar Revision Settlement, 1879.

| | | | GOVERNMENT OCCUPIED LAND. | | | | | | | | |
|--------|-------------------------------------|--------|---------------------------|--------|--------------------------|--------------|-----------|--------------------------|--|--|--|
| CLASS. | GOVERN- CLASS. MENT VILLAGES. | | rmer Surv | ey. | | Revision | n Survey. | | | | |
| | | | Rental. | Area. | a Rental lincreace ~ | | _ | st Dry Crop re Rates. | | | |
| | | Acres. | Rs. | Acres. | Rs. | Per Cent. | Rs. | a. | | | |
| I. | 3 | 4375 | 2812 | 4406 | 4481 | 59.4 | 2 | 12 | | | |
| II. | 3 | 1844 | 1125 | 1930 | 1693 | 50.5 | 2 | 0 | | | |
| III. | 2 | 5721 | 3003 | 5908 | 4716 | 57.0 | 1 | 14 | | | |
| IV. | 1 | 242 | 124 | 245 | 127 | 2.4 | 1 | 12 | | | |
| V. | 1 | 1387 | 869 | 1481 | 1128 | 29.8 | 1 | 8 | | | |
| VI. | 8 | 22,906 | 10,553 | 22,930 | 13,486 | 27.8 | 1 | 6 | | | |
| Total | 18 | 96,475 | 18,486 | 36,900 | 25,631 | 39.0 | | | | | |

Ten acres of Government arable waste were assessed at 4s. (Rs. 2) or an average acre rate of 4¾d. (3¹/6 as.). [Colonel Laughton, Surv. Supt. 119 of 1st Feb. 1879.] The proposed settlement was sanctioned in April 1879 with an intimation that the new rates should not be levied till the next year. [Res. 2159 of 23rd April 1879.]

1879-80.

In 1870-80 the rainfall was 21 inches at Indapur, 34 at Poona, 36 at Junnar, and 57 at Khadkala, but the falls were untimely. The rice and other early crops were damaged by drought and by rats, and the outturn was middling. From the ravages of rats and from want of moisture, the late crop was only partial and the outturn poor. Government sanctioned a payment of 2s. (Re. 1) for every 100 rats killed and over 350,000 were destroyed. Public health was generally good, except a violent outbreak of cholera in Poona city which caused over 500 deaths. [Bom. Pres. Genl. Adm. Rep. for 1879-80,79-81.] Tillage fell from 1,861,631 to 1,775,553 acres, collections rose from £104,030 to £110,776 (Rs. 10,40,300-Rs. 11,07,760), £397 (Rs. 3970) were remitted, and £2445 (Rs. 24,450) left outstanding. At Indapur the rupee price of Indian millet rose from about 20 to 18 pounds (10-9 *shers*).

SURVEY RESULTS, 1836-1880.

As many territorial changes took place after the first revenue survey was begun in 1836, to show the results of the survey settlements in the villages of the present (1884) Poona district, special returns were prepared by the survey department in 1880-81. Mr. R B. Pitt, Asst. Supt. of Survey, 21st July 1881. These returns show that the survey settlement has been introduced into 9921/4 Government and 1603/4 alienated villages of the present Poona district which contains 9961/4 Government and 2043/4 alienated villages. Between 1867 when the survey leases of the different groups began to fall in, up to 1880 when the special returns were prepared, revised settlements had been introduced into 3761/4 Government and seven alienated villages. Of the 1153 villages into which survey rates were introduced, complete details were not available for thirty-eight Government and forty-seven alienated villages. The rate of the progress of the survey was as shown below. In 1836-37, 29 Government villages were settled; in 1837-38. 47; in 1838-39, 26; in 1839-40, 36; in 1840-41, 7; in 1841-42, 70; in 184243, 39; in 1843-44, 51; in 1844-45, 1; in 1845-46, 2; in 1846-47,3½; in 1847-48, 54; in 1848-49, 23; in 1849-50, 5; in 1850-51, 112; in 1851-52, 87; in 1852-53, 133; in 1853-54, 199; in 1854-55, 4; in 1856-57, 32; in 1857-58, 1; in 1858-59, 7; in 1863-64, 5; in 1864-65,10; in 1868-69,3; in 1869-70, 34; in 1873-74, 3; in 1874-75, 2; total Government villages 9921/4. In 1837-38 one alienated village was settled; in 1841-42, 3; in 1842-43,1; in 1846-47,½; in 1847-48,1; in 1848-49, 1; in 1852-53, 2; in 1853-54, 2; in 1854-55, 9; in 1856-57, 6; in 1857-58, 2; in 1858-59, 2; in 1860-61, 1; in 1861-62, 2; in 1863-64, 11; in 1864-65, 48; in 1865-66, 1; in 1868-69, 34; in 1869-70, 10¹/₄; in 1870-71, 2; in 1871-72, 3; in 1875-76, 12; in 1878-79,2; in 1879-80, 4; total alienated villages, 1603/4; total Government and alienated villages 1153. The revised survey settlement was introduced in 1867-68 in 76 Government villages; in 1871-72 in 53; in 1873-74 in 1791/4; in 1874-75 in 11/2; in 1875-76 in 6; in 1878-79 in 91/2; in 1879-80 in 51; total Government villages 3761/4. The revised survey settlement was

introduced in seven alienated villages, one in 1867-68, one in 1871-72, two in 1873-74, half in 1874-75, half in 1878-79, and two in 1879-80.]

The returns for 9541/4 Government villages, for which complete details were available, show that, compared with the average of the ten years before the survey, the average for the whole period during which the survey settlement was in force shows a fall in waste from 526,857 to 141,623 acres or 73 per cent and in remissions from £25,717 to £2012 (Rs. 2,57,170-Rs. 20,120) or 92 per cent, and an increase in occupied land [Government] and alienated occupied land in Government villages. The fall in waste is 385,234 acres while the increase in occupied area is 722,612 acres. "The discrepancy is due to imperfect measurements in former years.] from 1,071,585 to 1,794,197 acres or 67.43 per cent, and in collections from £75,592 to £91,586 (Rs. 7,55,920-Rs. 9,15,860) or 21 per cent. Compared with the ten years before the survey, the figures for 1879-80 show a fall in waste from 526,857 to 159,583 acres or 69.7 per cent, and in remissions from £25,717 to £393 (Rs. 2,57,170-Rs.3930) or 98.47 per cent, and an increase in occupied land from 1,071,585 to 1,855,765 acres or 73.18 per cent; and in collections from £75,592 to £102,415 (Rs. 7,55,920-Rs. 10,24,150) or 35.48 per cent. The returns for 113\% surveyed alienated villages, for which complete details were available, show that, compared with the ten years before the survey, the average for the whole survey period shows a fall in waste from 21,590 to 7382 acres or 65.8 per cent and in remissions from £5630 to £245 (Rs. 56,300 - Rs. 2450) or 95.6 per cent; and an increase in occupied land from 200,727 to 276,114 acres or 37.5 per cent, and in collections from £14,498 to £17,614 (Rs. 1,44,980-Rs. 1,76,140) or 21.49 per cent. Compared with the ten years before the survey the figures for 1879-80 show a fall in waste from 21,590 to 6029 acres or 72 per cent and in remissions from £5630 to £11 (Rs. 56,300 - Rs. 110) or 9980 per cent, and an increase in occupied land from 200,727 to 277,607 acres or 38.30 per cent, and in collections from £14,498 to £17,614 (Rs.1,44,980-Rs. 1,76,140) or 21.49 per cent. The following statement shows for the Government and the alienated or *inam* villages of each sub-division the chief changes in tillage area, remissions, collections, and outstandings, since the introduction of the revenue survey: [In this statement before Survey means the average of the ten years before the revenue survey settlement, and Survey means the average of the whole period during which the original and revised revenue survey rates were in force.]

Poona Survey Results, 1836-1880.

| Cl. | Sub- | | SED. | DEMIC | COI | NS. | OUT- | |
|------------------------------|--------|-----------|--------|------------------|-----------|----------------|--------|-----------------|
| Division. | YEAR. | Occupied. | Waste. | REMIS- SIONS. | Assessed. | Un- arable. | Total. | STAND- INGS. |
| Govern- ment Villages. | | Acres. | Acres. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Maval | Before | 48,272 | 41,271 | 1644 | 46,038 | 2958 | 48,996 | 974 |

| | Survey | | | | | | | |
|-----------|-------------------|---------|-------------|--------|----------|------------|----------|--------|
| | Survey | 105,809 | 17,935 | 773 | 59,037 | 2342 | 61,379 | 252 |
| | 1879- 80 | 115,073 | 12,533 | | 62,643 | 790 | 63,433 | |
| | Before Survey. | 143,561 | 44,829 | 23,199 | 1,35,354 | 2050 | 1,37,404 | 13,473 |
| Junnar | Survey | 208,353 | 17,809 | 951 | 1,36,110 | 2997 | 1,39,107 | 641 |
| | 1879- 80 | 218,221 | 14,282 | 7 | 1,43,030 | 480 | 1,43,510 | |
| | Before Survey. | 149,927 | 74,768 | 35,364 | 80,148 | 1468 | 81,616 | 5047 |
| Sirur | Survey | 224,014 | 14,925 | 2316 | 1,08,853 | 1646 | 1,10.499 | 5108 |
| | 1879- 80 | 237,252 | 6405 | 10 | 1,27,084 | 178 | 1,27,262 | |
| | Before Survey. | 118,298 | 54,698 | 22,664 | 1,30,695 | 5109 | 1,35,804 | 2755 |
| Khed | Survey | 259,676 | 27,616 | 1997 | 1,35,540 | 8203 | 1,43,743 | 204 |
| | 1879- 80 | 278,651 | 8257 | | 1,48,649 | 1085 | 1,49,734 | 3 |
| | Before Survey. | 72,504 | 18,660 | 32,037 | 64,727 | 2923 | 67,650 | 4246 |
| Purandhar | Survey | 144,513 | 1500 | 165 | 63,548 | 8461 | 67,009 | 1102 |
| | 1879- 80 | 142,716 | 4152 | 660 | 78,875 | 1042 | 79,917 | 1424 |
| | Before Survey | 139,481 | 73,817 | 60,456 | 60,662 | 2275 | 62,937 | 5615 |
| Indapur | Survey | 226,084 | 9202 | 3256 | 79,483 | 1335 | 80,818 | 7013 |
| | 1879- 80 | 191,699 | 63,022 | 1119 | 79,341 | 5112 | 84,453 | 12,676 |
| | Before Survey. | 220,850 | 161,25 2 | 57,086 | 1,03,545 | 3093 | 1,06,638 | 10,970 |
| Bhimthadi | Survey | 413,228 | 39,006 | 7073 | 1,72,124 | 3661 | 1,75,785 | 16,943 |
| | 1879- 80 | 426,582 | 47,355 | 704 | 2,08,379 | 11,04 2 | 2,19,421 | 1905 |
| Haveli | Before | 123,692 | 57,562 | 24,716 | 1,08,673 | 6206 | 1,14,879 | 72 |

| | Survey. | | | | | | | |
|-------------------|-------------------|---------------|-------------|--------------|----------|------------|----------|--------|
| | Survey | 212,520 | 13,631 | 3590 | 1,29,655 | 7869 | 1,37,524 | 70 |
| | 1879- 80 | 245,571 | 3577 | 1435 | 1,55,448 | 971 | 1,56,419 | |
| | Before Survey | 1,071,58 5 | 526,85 7 | 2,57,16 6 | 7,29,842 | 26,08 2 | 7,55,924 | 43,152 |
| Total | Survey | 1,794,19 7 | 141,62 3 | 20,121 | 8,84,350 | 31,61 4 | 9,15,864 | 31,828 |
| | 1879- 80 | 1,855,76 5 | 159,58 3 | 3935 | 10,03,44 | 20,70 0 | 10,24,14 | 16,008 |
| Inam Villages. | | | | | | | | |
| | Before Survey. | 449 | 321 | 71 | 665 | 3 | 668 | |
| Maval | Survey | 661 | 97 | 2 | 900 | 8 | 908 | 4 |
| | 1879- 80 | 753 | - | - | 977 | 21 | 998 | |
| | Before Survey. | 9225 | 1466 | 2609 | 4829 | 102 | 4931 | 247 |
| Junnar | Survey | 16,541 | 1314 | 128 | 6126 | 28 | 6154 | 145 |
| | 1879- 80 | 16,725 | 930 | 23 | 6146 | | 6146 | |
| | Before Survey. | 38,725 | 10,561 | 6789 | 20,058 | 328 | 20,386 | 864 |
| Sirur | Survey | 52,224 | 1635 | 216 | 27,644 | 322 | 27,966 | 2926 |
| | 1879- 80 | 52,006 | 1849 | | 27,922 | 75 | 27,997 | 2019 |
| | Before Survey. | 18,141 | 775 | 13,299 | 25,772 | 3375 | 29,147 | 3574 |
| Khed | Survey | 41,206 | 773 | 816 | 29,459 | 3235 | 32,694 | 2186 |
| | 1879- 80 | 41,515 | 1039 | 56 | 30,378 | 2787 | 33,165 | 2318 |
| Purandhar | Before Survey | 33,243 | 1750 | 5404 | 26,054 | 1506 | 27,560 | 2892 |
| | Survey | 52,778 | 801 | 41 | 29,154 | 1345 | 30,499 | 3758 |

| | 1879- 80 | 53,074 | 567 | 9 | 29,917 | 878 | 30,795 | 4210 |
|-----------|------------------|---------|--------|--------|----------|------------|----------|--------|
| | Before Survey | 4653 | | 177 | 2576 | 43 | 2619 | 4 |
| Indapur | Survey | 6349 | 11 | 331 | 2854 | 48 | 2902 | 541 |
| | 1879- 80 | 6316 | 44 | | 3180 | 10 | 3190 | 2600 |
| | Before Survey | 20,835 | 992 | 7442 | 12,799 | 893 | 13,692 | 2363 |
| Bhimthadi | Survey | 35,493 | 579 | 580 | 17,530 | 950 | 18,480 | 4206 |
| | 1879- 80 | 36,128 | 1 | | 17,959 | 896 | 18,855 | 2716 |
| | Before Survey | 75,456 | 5725 | 20,512 | 40,357 | 5621 | 45.978 | 65 |
| Haveli | Survey | 70,862 | 2172 | 339 | 50,781 | 5752 | 56,533 | 1 |
| | 1879- 80 | 71,090 | 1599 | 24 | 51,362 | 3636 | 54,998 | |
| | Before Survey | 200,727 | 21,590 | 56,303 | 1,33,110 | 11,87 1 | 1,44.981 | 10,009 |
| Total | Survey | 276,114 | 7382 | 2453 | 1,64,448 | 11,68 8 | 1.76.136 | 13,767 |
| | 1879- 80 | 277,607 | 6029 | 112 | 1,67,841 | 8303 | 1,76,144 | 13,863 |

1880-81.

In 1880-81 the rainfall was 18 inches at Indapur, 20 at Poona, 18 at Junnar, and 36 at Khadkala. On the whole the rainfall was considerably below the average; but except in the western subdivisions and in north and west Purandhar, the early crops were fair. A seasonable fall in September caused a good late harvest everywhere except in Sirur. The scanty rainfall occasioned a drought during the hot weather in parts of the district. Public health was generally good, but cholera prevailed to a slight extent in Haveli, Purandhar, and Maval, causing 461 deaths. [Bom. Pres. Genl, Adm. Rep, for 1880-81, 85-87.] Tillage rose from 1,775,553 to 1,777,153 acres and collections from £110,776 to £112,790 (Rs. 11,07,760 - Rs. 11,27,900), £133 (Rs. 1330) were remitted, and £1231 (Rs. 12,310) left outstanding. At Indapur the rupee price of Indian millet fell from about 18 to 28 pounds (9-14 *shers*).

1881-82.

In 1881-82 the rainfall was 25 inches at Indapur, 25 at Poona, 22 at Junnar, 58 at Khadkala, and 26.52 over the whole district. In June the rainfall was short in the west and good in the east where the sowing of the early or *kharif* crops was begun. In July the fall was abundant especially in the centre and east, and sowing was general. In a few Junnar and Khed villages the early or *kharif* crops were slightly injured by insects which the people called nose-cutters or *naktodas*. Over the whole district the outturn was about a three-quarters crop (12 *as.*). The late or *rabi* crops were seven-eighths (14 *as.*) of a full crop in Indapur, and three-fourths (12 *as.*) in Bhimthadi, Purandhar, and Sirur. Grass and water were plentiful in Indapur, but want of water was felt in Bhimthadi, Haveli, Junnar, and part of Purandhar. The Indapur cotton was about a three-quarters (12 *as.*) crop. Tillage rose from 1,777,153 to 1,786,064 acres and collections from £112,790 to £115,069 (Rs. 11,27,900-Rs. 11,50,690), £339 (Rs.8390) were remitted, and £282 (Rs. 2820) left outstanding. At Indapur the rupee price of Indian millet fell from about 28 to 50 pounds (14-25 *shers*).

1882-83.

In 1882-83 the rainfall was 27.82 inches at Indapur, 36.23 at Poona, 33.99 at Junnar, 80.27 at Khadkala, and 35.93 over the whole district. The early rains were good and general. In Haveli, including the Mulshi petty division, excessive rain at the burst of the monsoon destroyed some dams and washed away rice-seed. In the rest of the west the early harvest was good; in the east the early harvest was fair, about a three-eighths (6 as.) crop. The late harvest was nearly ruined but was saved by a heavy fall late in November, and yielded from a five-eighths to a seven-eighths (10-14 as.) crop. Except in Indapur and Bhimthadi, from the end of September, locusts destroyed from a sixth to a quarter of the crop. The damage was most serious in the western Mavals where the *nachni*, *vari*, and other hill grains suffered severely. Tillage fell from 1,786,064 to 1,775,583 acres and collections from £115,069 to £103,672 (Rs. 11,50,690-Rs. 10,36,720), £10,865 (Rs. 1,08,650) were remitted, and £966 (Rs. 9660) left outstanding. At Indapur the rupee price of Indian millet fell from about 50 to 62 pounds (25-31 *shers*).

1883-84.

In 1883-84 the rainfall was 37.48 inches at Indapur, 47.42 at Poona, 37.58 at Junnar, 7314 at Khadkala, and 40 91 over the whole district. The fall was abundant except in Khed, Khadkala, and the petty divisions of Mulshi and Ambegaon. In the plain or *desh* villages of Junnar a heavy and timely rainfall favoured the early or *kharif* crops. They were slightly injured by excessive damp in September and October, and the *bajri* was tinged red. The outturn was about a three-fourths (12 *as.*) crop. In Bhimthadi and Indapur the late harvest suffered from excessive rain in October and did not yield more than a half (8 *as.*) crop. Except in Indapur locusts were everywhere in the district but did little harm. [Details regarding locusts are given above under Agriculture Chap. IV.] At Indapur the rupee price of Indian millet fell from about 62 to 64 pounds (31-32 *shers*).

REVENUE STATISTICS, 1837-1884.

The following statement [Grain prices were supplied by the Collector, 1011 of 8th Feb. 1884.] shows the available yearly statistics of rainfall, prices, tillage, and land revenue during the forty-seven years ending 1883-84:

Poona Tillage and Revenue, 1837-1884.

| YEAR. | GOVERN-MENT VILLAGES. | RAINFALL | | MILLET Shers THE Rupee. | | | | |
|--------------|--------------------------|---------------|--------------|-------------------------|--------|---------|-------|-----------|
| | | | | Indapur. | | Junnar. | | TILLAGE. |
| | | Inda- pur. | Jun- nar. | Jvari | Bajri. | Jvari | Bajri | |
| | | Inches | | | | | | Acres. |
| 1837- 38. | 882 | | | 36 | 44 | | | |
| 1838- 39. | 882 | | | 67 | 30 | | | |
| 1839- 40. | 882 | | | 44 | 30 | | | 895,438 |
| 1840- 41. | 883 | | 1 | 64 | 44 | | | 947,840 |
| 1841- 42. | 889 | | 1 | 56 | 40 | | | 982,600 |
| 1842- 43. | 8921/2 | | 1 | 68 | 42 | | | 1,000,881 |
| 1843- 44. | 9001/2 | | 1 | 72 | 44 | 57 | 51 | 1,055,282 |
| 1844- 45. | 933 | | 1 | 60 | 36 | 45 | 46 | 1,063,127 |
| 1845- 46. | 938 | | | 36 | 25 | 32 | 30 | 1,102,088 |
| 1846- 47. | 937 | | - | 15 | 13 | 31 | 30½ | 1,148,755 |
| 1847- 48. | 939 | | | 48 | 32 | 58 | 571/2 | 1,228,304 |
| 1848- 49. | 940 | | | 72 | 56 | 87 | 88 | 1,227,898 |

| 1849- 50. | 940 | | | 72 | 56½ | 66½ | 69½ | 1,196,719 |
|--------------|------|----|----|----|-----|-------|-----|-----------|
| 1850- 51. | 937 | | | 38 | 34 | 44 | 32 | 1,215,015 |
| 1851- 52. | 942 | | | 40 | 32 | 45 | 43 | 1,273,394 |
| 1852- 53. | 942 | | | 56 | 40 | 55 | 53 | 1,316,767 |
| 1853- 54. | 941 | | | 56 | 36 | 51 | 48 | 1,368,430 |
| 1854- 55. | 947 | | | 29 | 26 | 381/2 | 30 | 1,395,080 |
| 1855- 56. | 970 | | | 32 | 29 | 351/2 | 35 | 1,447,006 |
| 1856- 57. | 973 | | | 32 | 28 | 401/2 | 35 | 1,534,473 |
| 1857- 58. | 981 | | | 39 | 37 | 411/2 | 34 | 1,566,231 |
| 1858- 59. | 982 | | | 32 | 28 | 39 | 37 | 1,598,885 |
| 1859- 60. | 983 | | | 39 | 31 | 411/2 | 42 | 1,654,399 |
| 1860- 61. | 983 | | | 33 | 23 | 40 | 33½ | 1,664,802 |
| 1861- 62. | 988 | 23 | 35 | 27 | 19 | 36 | 29 | 1,691,352 |
| 1862- 63. | 989 | 12 | 10 | 16 | 16 | 21 | 17 | 1,696,097 |
| 1863- 64. | 990 | 3 | 17 | 13 | 12 | 16 | 12 | 1,720,335 |
| 1864- 65. | 988 | 10 | 15 | 16 | 14 | 20 | 16½ | 1,736,582 |
| 1865- 66. | 988 | 6 | 20 | 18 | 15 | 21 | 19 | 1,743,179 |
| 1866- 67. | 986½ | 5 | 24 | 23 | 21 | 24 | 19 | 1,784,390 |
| 1867- | 981½ | 20 | 26 | 41 | 32 | 24 | 18 | 1,803,708 |

| 68. | | | | | | | | |
|--------------|--------|----|----|----|----|-------|-------|-----------|
| 1868- 69. | 9921/2 | 8 | 25 | 35 | 27 | 24 | 20 | 1,814,896 |
| 1869- 70. | 992½ | 26 | 25 | 29 | 22 | 21 | 18 | 1,819,237 |
| 1870- 71. | 9931/2 | 24 | 30 | 25 | 19 | 21 | 18 | 1,831,953 |
| 1871- 72. | 992½ | 15 | 27 | 30 | 24 | 201/2 | 17 | 1,842,868 |
| 1872- 73. | 992½ | 26 | 15 | 14 | 10 | 23 | 20 | 1,848,831 |
| 1873- 74. | 991¾ | 14 | 13 | 24 | 17 | 29½ | 241/2 | 1,901,205 |
| 1874- 75. | 990¾ | 27 | 25 | 30 | 22 | 36½ | 30 | 1,884,679 |
| 1875- 76. | 990¾ | 21 | 34 | 28 | 21 | 34 | 24 | 1,875,669 |
| 1876- 77. | 989¾ | 5 | 17 | 19 | 15 | 12 | 10½ | 1,864,475 |
| 1877- 78. | 991 | 28 | 17 | 9 | 9 | 10½ | 9 | 1,868,193 |
| 1878- 79. | 992 | 29 | 39 | 10 | 9 | 10 | 9½ | 1,861,631 |
| 1879- 80. | 994 | 21 | 36 | 9 | 9 | 12 | 11 | 1,775,553 |
| 1880- 81. | 995 | 18 | 18 | 14 | 12 | 23 | 17 | 1,777,153 |
| 1881- 82. | 995¾ | 25 | 22 | 25 | 19 | 29½ | 201/4 | 1,786,064 |
| 1882- 83. | 998 | 28 | 34 | 31 | 23 | 271/2 | 21 | 1,775,583 |
| 1883- 84. | | 37 | 37 | 32 | 23 | 22 | 17 | |

continued..

| VEAD | LAND REVENUE. | | | | | | |
|----------|---------------|----------------|---------------|-----------|--|--|--|
| YEAR. | Remitted. | For Collection | Outstand-ing. | Collected | | | |
| | Rs. | Rs. | Ra. | Rs. | | | |
| 1837-38. | 72,410 | 6,81,869 | 45,745 | 6,36,124 | | | |
| 1838-39. | 1,86,263 | 5,67,319 | 19,204 | 5,48,115 | | | |
| 1839-40. | 1,06,399 | 6,75,910 | 4944 | 6,70,966 | | | |
| 1840-41. | 99,262 | 7,00,295 | 17,503 | 6,82,792 | | | |
| 1841-42. | 1,20,314 | 6,67,369 | 24,408 | 6,42,961 | | | |
| 1842-43. | 26,837 | 7,79,215 | 9635 | 7,69,580 | | | |
| 1843-44. | 42,917 | 7,48,920 | 4498 | 7,44,422 | | | |
| 1844-45. | 92,395 | 7,22,720 | 33,321 | 6,89,399 | | | |
| 1845-46. | 1,05,947 | 7,16,820 | 27,983 | 6,88,837 | | | |
| 1846-47. | 19,283 | 8,38,079 | 22,473 | 8,15,606 | | | |
| 1847-48. | 24,622 | 8,25,627 | 7176 | 8,18,451 | | | |
| 1848-49. | 40,610 | 7,87,193 | 11,838 | 7,75,355 | | | |
| 1849-50. | 31,483 | 7,73,188 | 10,759 | 7,62,429 | | | |
| 1850-51. | 51,961 | 7,34,492 | 4168 | 7,30,324 | | | |
| 1851-52. | 28,362 | 8,07,881 | 3258 | 8,04,628 | | | |
| 1852-53. | 7278 | 8,01,173 | 452 | 8,00,721 | | | |
| 1853-54. | 82,942 | 7,27,260 | 2498 | 7,24,762 | | | |
| 1854-55. | 6123 | 8,16 107 | 244 | 8,14,863 | | | |
| 1855-56. | 10,320 | 8,54,705 | 413 | 8,54,292 | | | |
| 1856-57. | 16,489 | 8,79,633 | 351 | 8,79,282 | | | |
| 1857-58. | 2907 | 9,19,798 | 607 | 9,19,191 | | | |
| 1858-59. | 2427 | 9,33,139 | 93 | 9,33,046 | | | |
| 1859-60. | 364 | 9,56,644 | 13 | 9,56,631 | | | |
| 1860-61. | 238 | 9,66,230 | 47 | 9,66,183 | | | |
| 1861-62. | 4 | 10,02,623 | 3297 | 9,99,326 | | | |
| 1862-63. | 422 | 9,97,414 | 423 | 9,96,991 | | | |

| 1863-64. | 1467 | 10,23,171 | 34,378 | 9,88,793 |
|----------|----------|-----------|----------|-----------|
| 1864-65. | 228 | 10,21,771 | 15,357 | 10,06,414 |
| 1865-66. | 128 | 10 67,770 | 12,557 | 10,55,213 |
| 1866-67. | 80,038 | 10,09,062 | 71,766 | 9,37,296 |
| 1867-68. | 44,325 | 11,17,101 | 1011 | 11,16,090 |
| 1868-69. | 48,592 | 11,56,213 | 429 | 11,55,784 |
| 1869-70. | 4786 | 12,01,745 | 269 | 12,01,476 |
| 1870-71. | 4756 | 11,13,031 | 2553 | 11,11,378 |
| 1871-72. | 57,779 | 10,91,870 | 1,24,497 | 9,67,373 |
| 1872-73. | 5468 | 11,72,415 | 45,521 | 11,26,894 |
| 1873-74. | 1,77,957 | 10,82,430 | 91,255 | 9,91,175 |
| 1874-75. | 40,615 | 11,90,531 | 7203 | 11,83,328 |
| 1875-76. | 34,805 | 11,33,761 | 7032 | 11,26,729 |
| 1876-77. | 1736 | 11,60,041 | 4,66,828 | 7,03,213 |
| 1877-78. | 1349 | 11,70,134 | 68,657 | 11,01,477 |
| 1878-79. | 250 | 11,48,949 | 1,08,644 | 10,40,305 |
| 1879-80. | 3970 | 11,32,209 | 24,446 | 11,07,763 |
| 1880-81. | 1334 | 11,40,214 | 12,309 | 11,27,905 |
| 1881-82. | 3392 | 11,53.509 | 2822 | 11,50,687 |
| 1882-83. | 1,08,651 | 10,46,882 | 9664 | 10,36,718 |
| 1883-84. | | | | |

AGRICULTURAL BANKS, 1884.

The object [Mr. Moore, C. S. Collector of Poona, 1884.] of the promoters of the agricultural bank scheme is to form an association of local moneylenders and others who will advance money at a comparatively low rate of interest not to exceed twelve per cent to landholders, who, though hampered by debt, are not insolvent. It is proposed that as a preliminary, an experienced covenanted revenue officer be appointed to inquire into the condition of the landholders of the Purandhar sub-division. All who are hopelessly insolvent will be put on one side and with such the bank will have no dealings. As regards others, the special officer will endeavour to effect a compromise with the creditors for the settlement of old debts. If he can succeed in coming to terms with the creditors, they will be paid in money down from the Government treasury in satisfaction of all claims, and the debts will form a rent charge on the lands of the debtors, second to

the Government assessment. The instalments are to be fixed at a reasonable amount including interest at nine per cent, with a sinking fund of three per cent to extinguish the original debt. The rent charge, it is suggested, should be taken over by the bank, who would repay Government the amount advanced to meet old debts and would make loans to agriculturists for improvements, for cattle, and for seed; provided the security is sufficient, and provided that Government consent to such loans forming a lien on the crop to be recoverable as arrears of land revenue. The loans would be made on mortgages executed by the agriculturists receiving them and the money advanced would not exceed 60 per cent of the full value of the security. It is believed that the scheme is being delayed owing to doubts on the part of the Government of India of the wisdom of recovering loans made by the bank as arrears of land revenue.

Poona 3

PREFACE

I am happy to bring out this Facsimile Reproduction of Poona District Gazetteer (Third Volume), which was first published in 1885 by the British Government in the series of Gazetteers of the Bombay Presidency. This Volume was edited by Mr. James M. Campbell, I. C. S. This encyclopaedic volume compiled 106 years ago has now become scarce and has gone out of print. The second revised edition of the Poona District Gazetteer was published in a single volume by this department in 1954. However, the utility of the Gazetteers in the Old Series is still undiminished because they contain authentic and very useful information on several aspects of life, and have the impress of profound scholarship and learning. They have not lost their utility due to the mere passage of time. It was, therefore, felt necessary to preserve this treasure of knowledge for posterity. There is also a good demand from scholars that all the Old Gazetteers should be reprinted, even though a revised edition is available. With these considerations in view, it was thought that the Gazetteer Volumes in Old Series should be reprinted. I am sure, scholars and studious persons will find them very useful.

It may be pertinent to state that a totally rewritten Marathi edition of the Pune District Gazetteer is being brought out by us.

I am thankful to the Director, Government Printing and Stationery, Shri P. S. More and the Manager, Government Photozinco Press, Pune, Shri A. C. Sayyed and other Staff in the Press for expeditiously completing the work of reprinting.

Bombay,

DR. K. K. CHAUDHARI

15 June 1991.

Executive Editor and Secretary.

JUSTICE

EARLY HINDU.

[Manu's Institutes in Elphinstone's History of India, 27 - 39,]

IN early Hindu times, according to the law books, justice was administered by the king in person aided by Brahmans and other counsellors, or by one Brahman aided by three Brahman assessors. Though no exception was made for the conduct of criminal trials the

king was expected to take a more active share in criminal than in civil causes. At towns remote from the royal residence the king's representative filled his place in the courts of justice, or local judges were appointed by the king. A provision was also made for three grades of arbitration, firstly of kinsmen, secondly of men of the same trade, and thirdly of townsmen. An appeal from the kinsmen lay to men of the same trade and from men of the same trade to townsmen. Appeals lay from all three to the local court, from that to the chief court at the capital, and from that to the king in his own court composed of a certain number of judges to whom were joined his ministers and his domestic spiritual adviser. The king was entitled to five per cent on all debts admitted by the defendant on trial and ten per cent on all denied and proved. The fee probably went to the judges. A king or judge was to observe the countenances, gestures, and mode of speech of the parties and witnesses, and to attend to local usages, the peculiar laws of classes and rules of families, and the customs of traders, and also, when not inconsistent with the above, principles established by former judges. Neither the king nor his officers were to encourage litigation though they were not to show any slackness in taking up any suits regularly instituted. They were enjoined to bear with rough language from angry litigants and from the old and sick. They were cautioned against deciding causes on their own judgment without consulting persons learned in the law and were forbidden to disturb any transaction that had once been settled conformably to law. They were also to adhere to established practice. The criminal law was very rude, and punishments in some cases were too heavy and in others too light. Mutilation, chiefly of the hand, and burning alive were amongst the punishments inflicted on offenders against the priestly order. Torture was never employed against witnesses or criminals. The punishments were often disproportionate to the offence, and were frequently so indistinctly or contradictorily declared as to leave the fate of an offender uncertain. Slaying a priest, drinking spirits, stealing the gold of a priest, and violating the bed of a natural or spiritual father were all classed under one head and subject to one punishment, branding on the forehead and banishment and absolute exclusion from the society of mankind. This at first was declared to be applicable to all classes. Afterwards a priest was allowed to expiate these sins by penance, was directed only to pay the middle fine, and in no case was deprived of his effects or the society of his family. Other classes even after expiation suffered death. Seducing the wife of another man at a place of pilgrimage or in a forest or at the meeting of rivers, sending her flowers or perfumes, touching her apparel or her ornaments, and sitting on the same couch with her were all punished with banishment and such marks as might excite aversion. For adultery itself, the woman was to be devoured by dogs and the man burnt on an iron bed, and if without aggravation the punishment was a fine of from 500 to 1000 pans. [A pan was equal to twenty mashas each containing about seventeen grains (Troy) of gold.] The punishment increased in proportion to the dignity of the person offended against. A soldier committing adultery with a Brahman woman if she was of eminently good qualities and properly guarded was to be burnt alive in a fire of dry grass or reeds. Though there was no express provision for murder it appears that murder as well as arson and robbery attended with violence was a capital offence. Theft if small was punished with fine and if of a large amount with cutting off the hand; if the thief was caught with the stolen goods it was a capital offence. Receivers of stolen goods and persons who harboured thieves were liable to the same punishment as the thief. In cases of small theft, a Brahman was fined at least ten times as much as a Shudra, and the

scale varied in a similar proportion for all classes. A king committing an offence was to pay a thousand times as great a fine as would be exacted from an ordinary person. Robbery was punished by the loss of the limb chiefly used in the robbery. If accompanied with violence robbery was a capital offence, and all who sheltered robbers or supplied them with food or tools were to be punished with death. Forging royal edicts, causing dissensions among great ministers, siding with the king's enemies, and slaying women, priests, or children were put under one head and were capital offences. Men who openly opposed the king's authority, who robbed his treasury, or stole his elephants, horses or cars were liable to capital punishment as were those who broke into a temple to steal. For cutting purses, the first offence was punished by cutting off the fingers, the second by cutting off the hand, and the third by death. False evidence was punished with banishment accompanied by fine except in the case of a Brahman, when it was banishment alone. Banishment was likewise inflicted on men who did not aid in repelling an attempt to plunder a town, to break down an embankment, or to commit highway robbery. Public guards not resisting or apprehending thieves were punished like the thieves. Gamesters and keepers of gaming houses were liable to corporal punishment. Most other offences were punished by fines, though sometimes other punishments took the place of fines. No fine exceeded 1000 pans or fell short of 250. Defamation was punished by fine except that Shudra offenders were liable to be whipped. Shudras were protected by a fine from defamation even by a Brahman. Men reproaching their neighbours with lameness, blindness, or any other natural infirmity were liable to a fine even if they spoke the truth. Assaults if among equals were punished by a fine of 100 pans for blood drawn, a larger sum for a wound, and banishment for breaking a bone. Proper provisions were made for injuries inflicted in self-defence, in consequence of being forcibly obstructed in the execution of duty, or in defence of persons unjustly attacked. Furious and careless driving involved fines as different in degree as the loss occasioned by the death of a man or of the lowest animal. Persons defiling the highways were subject to a small fine, besides being obliged to remove the nuisance. Ministers taking bribes in private affairs were liable to confiscation of their property. The offences of physicians or surgeons who injured their patients from want of skill, breaking hedges palisades and earthen idols, and mixing pure with impure commodities and other impositions on purchasers were lumped under a penalty of 250 to 500 pans. Selling bad grain for good incurred severe corporal punishment and a goldsmith guilty of fraud was ordered to be cut to pieces with razors. Forsaking parents, sons, or wives was punished by a fine of 600 pans; and the failure to invite neighbours to entertainments by a fine of a masha of silver.

The rules of police were harsh and arbitrary. Besides maintaining patrols and fixed guards, open and secret, the king had many spies who were to mix with the thieves and lead them into situations where they might be entrapped. When fair means failed the king seized the thieves and put them to death with their relations on proof of their guilt and the participation of the relations. Gamesters, public dancers and singers, revilers of scripture, open heretics, men who failed to perform the duties of their class, and sellers of spirituous liquors were banished.

The civil law was superior to the penal code. Its provisions were much more rational and matured than could be expected in so early an age. Witnesses were examined standing in the middle of the court and in the presence of both parties. The judge addressed a particular form of exhortation to them and warned them in the strongest terms of the enormous guilt of false evidence and the punishment with which it would be followed in a future state. If there were no witnesses, the judge admitted the oaths of the parties. The law of evidence in many particulars resembled that of England. Persons having a pecuniary interest in the cause, infamous persons, menial servants, familiar friends, and others disqualified on slighter grounds were in the first instance excluded from giving testimony, but in default of other evidence almost every description of persons were examined, the judge making due allowance for the disqualifying causes. A party advancing a wilfully false plea or defence was liable to a heavy fine. This rule though judicious was pushed to absurdity in subjecting to corporal punishment a plaintiff who procrastinated the prosecution of his demand. Appeals to ordeals were admitted. A creditor was authorized, before complaining to the court, to recover his property by any means in his power, resorting even to force within certain bounds. Interest varied from two per cent a month for a Brahman to five per cent for a Shudra. It was reduced to onehalf when there was a pledge and ceased altogether if the pledge could be used for the profit of the lender. Fraudulent contracts and contracts entered into for illegal purposes were null, A contract made even by a slave for the support of the family of his absent master was binding on the master. A sale by a person not the owner was void unless made in the open market and even in that case it was valid if the purchaser could produce the seller, otherwise the right owner might take the property on paying half the value. A trader breaking his promise was fined or if it was made on oath was banished. A sale might be unsettled by either party within ten days after it was made. Disputes between master and servant referred almost entirely to herdsmen and their responsibilities about cattle. In case of boundary disputes of villages and fields witnesses were examined on oath in the presence of all the parties concerned, putting earth on their heads, wearing chaplets of red flowers, and clad in red garments. If the question could not be settled by evidence the king made a general inquiry and fixed the boundary by authority.

The chief judicial institution was the village council or *panchayat*. The *panchayat* was assembled *by* order of the *gramadhikari* or village headman, and an appeal lay from its decision to the *deshadhikari* or district headman.

MUSALMAN.

The Muhammadan kings seem to have interfered little with the administration of justice beyond the seats of government. Their laws and regulations founded on the Kuran chiefly referred to their own class. The village council or *panchayat* system continued in force, except that the names of the village and district officers were changed to *patil* and *deshmukh*. [Grant Duffs Marathas, 18-19.]

Under the Moghals, in the time of the Emperor Akbar, justice was administered by a court composed of an officer named *Mir-i-Adl* that is Lord Justice, and a *kazi*. The *kazi* conducted the trial and stated the law, the *Mir-i-Adl* passed judgment and seems to have

been the superior authority. The police of considerable towns was under an officer called the *kotval*, in smaller places it was under the revenue officers, and in villages under the internal authorities. In all legal cases between Hindus a Brahman was a judge. The tone of instructions to all these functionaries was just and benevolent though by no means free from vagueness and puerility, and the spirit of the rules was liberal and humane; those to the *kotval* kept up the prying and meddling character of the police under a despotism. They forbade forestalling and regrating and in the midst of some very sensible directions there was an order that any one who drank out of the cup of the common executioner should lose his hand. A letter of instructions to the governor of Gujarat restricted his punishments to putting in iron, whipping, and death; and enjoined him to be sparing in capital punishments, and, unless in cases of dangerous sedition, to inflict no punishment until he had sent the proceedings to court and received the Emperor's confirmation. Capital punishment was not to be accompanied with mutilation or other cruelty. [Elphinstone's History of India, 544-545.]

MARATHA.

The military genius of the Marathas could never have been favourable to a system of justice. The peace of the country had been disturbed by so many wars, inroads, and rebellions that even under a more regular government it would have been vain to expect the observance of civil regulations. The treachery and rebellion of local officers, the dissensions among the nobility, the independence of jagirdars, and the rapacity of government officers were evils which would have shaken the foundation of the most substantial system, had such a system been organised during any period of the Maratha empire. The only institution that survived disturbances was the panchayat or jury. Had legislation been more consonant with the military disposition of the Marathas, they would naturally have revived the institutions prescribed by their own shastras, rather recurring to the old system than introducing a new one. But as the state had scarcely an interval of tranquillity they wanted time and opportunity as well as inclination for reform. One of Shivaji's ministers was termed a *nyayadhish*, a post which was renewed by his son Rajaram in 1690. Although little was done to establish courts of justice, the village establishment was sufficient to give justice to the people in common matters. [East India Papers, IV. 207.]

[Elphinstone's Report (1819), 54-67.] Under the Peshwas, the authorities by whom civil justice was administered were the *patil*, over him, the *mamlatdar* and the *sarsubhedar*, and above all the Peshwa or his minister. *Jagirdars* or estate-holders administered justice in their own lands, the great ones with little or no interference on the part of the government. In some towns a judicial officer, called the *nyayadhish*, tried causes under the Peshwa's authority, and any person whom the Peshwa was pleased to authorise might conduct an investigation subject to his confirmation. If a complaint was made to a *patil*, he would send for the person complained of, and if he admitted the debt, would interfere partly as a friend to settle the mode and time of payment. If the debt was disputed, and he and his *kulkarni* could not by their own influence or sagacity effect a settlement to the satisfaction of the parties, the *patil* called a jury or *panchayat* of the villagers, who inquired into the matter with very little form and settled as they thought best, but this

decision could not take place without the previous consent of the parties. If the complainant was refused a jury or disapproved of the decision, or if he thought proper not to apply to the *patil*, he went to the *mamlatdar* who proceeded nearly in the same manner as the patil, with this addition that he could compel the party complained of to submit to a panchayat, or else make satisfaction to the complainant. When there was a sarsubedar the same process might be repeated with him or at court, but in all this there was no regular appeal. The superior authority would not revise the decision of the inferior unless there had been some gross injustice or reason to suspect corruption. In cases of less purity, that is in almost all cases, the superior was influenced in receiving the appeal by the consideration of the profit promised as a compensation for the trouble. Though the government officer endeavoured himself to settle the dispute and though it rested with him to decide whether or not the case required a jury, yet it was held gross injustice to refuse one on a question at all doubtful, and it was always reckoned a sufficient ground for ordering a new investigation when there was no jury. The jury was therefore the great instrument in the administration of justice. The members of a jury were generally chosen by the officers of government, by whom the jury was granted with the approval and often at the suggestion of the parties. Sometimes each party chose an equal number and the officer named an umpire. Especially at Poona, a person on the part of government not unfrequently presided at *panchayats*. In affairs where government was concerned some of its officers were ordered to investigate the matter, but they were expected to be officers to whom the other party did not object. The members of a jury were people of the same situation in life as the parties or they were people likely to understand the subject, as bankers in a matter of account, and deshmukhs and deshpandes when the suit was about land. The number was always odd; it was never less than five, and was sometimes over fifty. It generally met at the house of the officer who summoned it. In villages the headman called some of the most intelligent landholders to sit under a tree or in the temple or village office. No one attended on the part of government, and as the parties could not be forced to accept the decision their wishes were more attended to than elsewhere. The consent of the parties was everywhere reckoned essential to a jury. The first act of the meeting was to take a written acknowledgment of such a consent. Security was also not unfrequently taken that the parties would comply with the jury's award. In petty disputes in villages, instead of a written acknowledgment the parties gave two straws in token of submission. The members of the jury were not entitled to any fee. Still there was the hope of presents from one or both parties which it was not disgraceful to take, unless to promote injustice. The parties likewise entreated the persons they wished to set on the jury and the government officer added his authority. It was reckoned disgraceful to refuse to serve on a jury and as the man who was asked to be a member today might be a suitor to-morrow, he was obliged to lend the aid which he was likely at some future time himself to require. Unless they had a good excuse people rarely refused to serve. It was more difficult to ensure their attendance. The parties entreated them and the magistrate sent messengers and orders to enforce the presence of members.

When a jury was met, if the defendant failed to attend, the members applied to the officer under whose authority it sat to summon him, or the plaintiff by constant demands and other modes of importunity wearied him into a submission. When the officer of government had to enforce the defendant's attendance, he sent a summons, or, if that

failed, set a messenger over him whom he was obliged to maintain, and imposed a daily fine until he appeared. The plaintiff's complaint was then read and the defendant's answer received, a replication and a rejoinder were sometimes added and the parties were crossquestioned by the jury. When under examination the parties were kept at a distance from their friends, but afterwards they might aid them as much as they chose. If it were inconvenient for him to attend, a man might send an agent in his service or a relation; but professional agents or vakils were unknown. After the examination of the parties accounts and other written evidence were called for and oral evidence was called for when written failed, but much more weight was given to written than to oral evidence. The witnesses seem to have been examined and cross-examined with great care, but only the substance of their evidence was taken down briefly without the questions and generally in their own hand if they could write. Oaths were seldom imposed unless there were reasons to suspect the veracity of the witness, and then great pains were taken to make them solemn. When the examination was concluded the jury after debating on the case drew up an award or summary called saraunsh, in which they gave the substance of the complaint and answer, an abstract of each of the documents presented on either side, a summary of the oral evidence on either side, and their own decision on the whole. A copy of the award was given to the successful party, and to the loser if he required it; another copy was deposited with the officer of government. In village juries nothing was written but the decision and sometimes not even that. In important cases all the usual writing was performed by the village accountant or kulkarni. Throughout the whole proceedings the jury appear to have been guided by their own notions of justice founded no doubt on the Hindu law and modified by local custom. They consulted no books and it was only on particular points immediately connected with the Hindu law such as marriage or succession that they referred to a shastri or divine for his opinion. On the report of the jury the officer of government proceeded to confirm and enforce its decree, as the jury had no executive powers. This caused frequent references to the magistrate and gave him considerable influence over the trial. If either party objected at this stage, and showed good reasons why the award should be set aside, the officer under whose authority the jury sat might require it to revise its decision, or he might even summon a new jury; this was not reckoned proper, unless corruption were strongly suspected. No other notice was taken of corruption. Unless in such cases the decision of a panchayat was always respected. The proverb runs Panch parameshvar, that is the jury is God Almighty. Even after an award was confirmed an appeal lay to a higher authority and a new jury might be granted. Even a new *mamlatdar* might revise proceedings held under his predecessor. This was probably a stretch of power, but everything under the Marathas was so irregular and arbitrary that the limits of just authority can with difficulty be traced. In enforcing the jury's decision much depended on the power of the magistrate. If a patil found the party who gained the cause could not recover his dues by the modes of private compulsion he applied to the *mamlatdar* to interpose his authority and in cases where that was insufficient the *mamlatdar* applied to government.

Disputes about boundaries which were extremely frequent were settled by a *panchayat* composed of *deshmukhs*, *deshpandes*, *patils*, and *kulkarnis* aided by the Mhars of the disputing villages who were the established guardians of land-marks and boundaries. Boundary disputes were also frequently adjusted by ordeal. One form of ordeal was for

the headman to walk along the disputed boundary bearing on his head a clod of the soil of both villages kneaded with various ingredients and consecrated by many rites. If the clod held together the justice of his claims was established; if it broke he lost his cause. Ordeals were also performed with boiling oil or by taking an oath and imprecating certain curses if the oath were false. If no evil occurred within a fixed time the gods were conceived to have decided in the swearer's favour. Ordeals were not uncommon in other cases as well as in boundary disputes, chiefly when other means of ascertaining the truth failed. Caste disputes were settled by the caste. Complaints of unjust expulsion from caste were settled by a jury called by government of respectable members of the same caste from an unprejudiced part of the country. Besides the patils and mamlatdars a few towns had officers of justice called *nyayadhishas*. The proceedings of all were irregular. The model was the able courageous and upright Ram Shastri who was at the head of the Poona court when Nana Fadnavis was minister and regent. Ram Shastri had several deputies, two of whom were almost as famous as himself, and by their aid the business was conducted. On receiving a complaint, a messenger or a writer from Ram Shastri or from Nana Fadnavis, according to the consequence of the person, was sent to summon or to invite him to attend at Ram Shastri's. If the person failed to attend orders were repeated by Nana Fadnavis and in the event of obstinate non-attendance, the house or lands of the defendant were seized. In case of nonappearance from absence, after many indulgent delays, the trial went on and the absence of the party was recorded that he might have a new trial on his return, if he accounted for his absence: in cases of land, no decision was final in a man's absence. Witnesses were summoned in the same form as the defendant, and if the witness was poor the summoner paid him his expenses. If the witness lived at a distance, or if attendance were inconvenient, a deputation from the court with some person from the parties was sent to take his evidence and the mamlatdar gave his aid to the process, or if the witness lived very far off, a letter was written requesting him to state the facts required. When the witness was a man of rank, a deputation would be sent to him from the government, accompanied by the parties who went as supplicants for his aid, rather thanas checks on his misstatement, and he was asked to relate what he knew and this was repeated in the court. Even if the witness were not of such rank as to prevent his coming to the court, if he were a man of any consequence, he was received as a visitor and the questions were put to him in the way of conversation and with all the usual forms of civility. When persons of this character were defendants, instead of summoning them to the *nyayadhish* a letter was written by Nana Fadnavis desiring them to settle the complaint. If this did not succeed, their agent was spoken to, and they felt the displeasure of government or part of their land was made over to the creditor. Generally great favour was shown to men of rank. If the plaintiff was also a man of rank, and if all other means failed, a jury of men of the same condition was appointed. The proceedings were much the same as those already mentioned except that more was done in writing. Ram Shastri and his deputies seem to have often presided at trials, the jury performing nearly the same function as an English jury. A good deal of the investigation seems to have been entrusted to Ram Shastri's writers who reported to him and the jury, and in the decree the names of the members of the jury were not mentioned, even when it was merely a repetition of their award. The decision was always in the Peshwa's name and in all important cases required his signature. All cases relating to land were considered important and were immediately under the superintendence of government. It was not

unusual in the country, as well as in Poona, for a government officer to receive the complaint and answer with the documents and the written evidence of witnesses, and lay the whole in this shape before the jury, who would call for more evidence if they required it. Much time must have been saved by this arrangement, but it gave the officer of government considerable opportunities of imposing on the jury. The members of the jury received no fee, but when they had much trouble, the winner of the suit made them openly a present for their pains. A sum of money was likewise levied for the government from the winner under the name of kerki or congratulatory offering and from the loser under the name of *gunhegari* or fine. These fines varied with the means of the litigants. In revenue accounts one-fourth of the property was always put down as the price paid for justice by the plaintiff when he won his cause. If the plaintiff lost his cause he was obliged to pay the defendant's expenses if the defendant was poor. When a cause was given against the defendant, the court settled the mode of payment with reference to his circumstances, either ordering immediate payment or directing payment by instalments or if the debtor was entirely destitute of the means of payment, granting him an exemption from the demands of his creditor for a certain number of years. When a matter once came to trial government was expected to enforce the decision, but with characteristic Maratha irregularity the plaintiff was often allowed to enforce the decision by dunning or takkaza which varied from simple importunity to tying the defendant neck and heels, or making him stand on one leg in the sun with a heavy stone on his head. In all claims, except for land, when the plaintiff had the power this dunning was the first step in the suit. Not until the person who suffered by it complained of excessive or unjust dunning did the government take any concern in the matter. Government enforced the debt by a system of dunning nearly the same as the plaintiff's. It also seized and sold the debtor's property, but spared his house and took care not to rain him. It likewise often fixed instalments by which the debt was gradually cleared. Debtors were never put in any public prison for private debt, though they were sometimes confined or tormented by the creditor at his house or in his patron's house. In rare cases, when this had been entered in the bond, the debtor was made to serve the creditor till the amount of his nominal wages equalled the debt. Honest bankrupts seem to have been let off nearly as at present. Fraudulent ones were made to pay when discovered notwithstanding a previous release. The great objects of litigation were boundary disputes, division of property on the separation of families, and inheritance to land which was perhaps the greatest source of litigation throughout the whole country. Debts to bankers were also frequently subjects for suits.

This judicial system was evidently liable to great objections. There was no regular administration of justice, no certain means of filing a suit, and no fixed rules for proceeding after the suit had been filed. It rested with the officer of government to receive or neglect a complaint. The reception of an appeal from his injustice equally depended on the arbitrary will of his superior. The other occupations of these officers rendered it difficult for them to attend to judicial affairs, even if well disposed, and these occupations increasing with the rank of the officer, the Peshwa who was the main spring of the whole machine must have been nearly inaccessible to all men and entirely inaccessible to the poor. The power of the local officer must also have had a tendency to check appeals and even to restrain the demands for juries in cases which he wished himself to decide, and this wish would be chiefly felt in cases where he had an inclination

to be the friend of one party, or where he hoped to make something by selling his favour to both. There can be little doubt that unless by means of bribery or by the aid of powerful friends justice was hard to get. The juries were open to corruption and partiality. When free from those stains they were slow in moving and feeble in their resolutions. When the jury was met it had not sufficient powers to seize the defendant, to summon the witness, or to compel the production of documents. In the event of any opposition it had to apply to the officer of government, and thus besides unavoidable delay, it was exposed to constant obstruction from his indolence, want of leisure, or corruption. If a deputy of the government officer sat with it to execute those duties, it was still liable to be obstructed from corruption, and was besides exposed to the influence of the agent who presided. When it had the evidence before it the members were not fitted to decide on nice or intricate causes. If they were perplexed they met without coming to a decision or allowed the matter to lie over until some circumstance prevented the necessity of meeting any more. These causes produced great delay and trials were often left unfinished. When the members were chosen by the parties and were interested in the cause, they were advocates rather than judges and their disputes caused as much delay as the neglect of the impartial. When they were impartial they were indifferent and irresolute unless some member, probably stirred to activity by a bribe, relieved his colleagues of the trouble of deciding. When their award was signed the jury dissolved and their decree remained with the local officer to enforce or neglect as he chose. Where so much was left arbitrary there was much corruption. Even after the British conquest it was common to have a complaint from a man who had an old decision even from the nyayadhish at Poona which he had not been able to get enforced. The want of principle in the rulers was another cause of uncertainty and litigation. No decision was final. A new mamlatdar or a new minister might take up a cause his predecessor had decided, the same man might revise his own decisions from corrupt motives, and there was as much difficulty in being exempt from an unjust revision as in obtaining a just one. In the time of the last Peshwa, the revenuefarming system made over each district to the highest bidder, who was generally the most unprincipled man about the court, and, as full support was requisite to enable him to pay his revenue, it consigned the people to his oppression without a remedy. The contractor's whole time and thought were spent in realizing his revenue. Justice was openly sold, and was never thought of except as a marketable commodity. A bribe could always enable the party in the wrong to prevent his cause going to a jury or overturn the decision of one. An appeal lay from the under-contractor to the upper whose income depended on the exactions of the authorities below him, and from him to the minister, who never received a complaint without a present, or to the Peshwa, who never received a complaint at all. The government gave little justice to the rich and none to the poor. Still, with all these defects the Maratha country flourished and the people seemed to have been free from some of the evils which exist under the more elaborate British Government. Some advantages must have counterbalanced the obvious defects of the system. Most of the advantages seem to have sprung from the fact that the government, though it did little to obtain justice for the people, left them the means of procuring it themselves. The advantage of this was specially felt among the lower orders who are most out of reach of their rulers and most apt to be neglected under all governments. By means of the jury they were enabled to effect a tolerable dispensation of justice among themselves, and it happens that most of the objections above stated to that institution do not apply in their

case. A patil was restrained from exercising oppression both by the fear of the mamlatdar and by the inconvenience of offending the society in which he lived, and when both parties were inclined to have a jury, he had no interest in refusing to call one. A jury could scarcely be perplexed in the simple causes that arose under its own eyes nor could it easily give a corrupt decision when all the neighbours knew the merits of the case. Defendants, witnesses, and members were all within the narrow compass of a village and where all were kept from earning their daily bread during the discussion there was not likely to be much needless complaint or affected delay. This branch of the native system was excellent for the settlement of the disputes of the landholders among themselves. It was of no use in protecting them from the oppression of their superiors. But here another principle came into operation. As the whole of the government revenue was drawn from the landholders, it was the obvious interest of government and its agents to protect the landholder and to prevent his suffering from any exactions but their own. In good times the exactions of government were limited by the conviction that the best way to enrich itself was to spare the landholder; and the exactions of the agents of government were limited by the common interest of government and the landholders in restraining their depredations. Under the influence of these principles while the native government was good, its landholders were fairly protected both from the injustice of their neighbours and from the tyranny of their superiors, and the landholders were the most numerous, most important, and most deserving portion of the community. It was in the class above the landholder that the defects of the judicial system were most felt, and even there they had some advantages. As the great fault of government was its inertness people were at least secure from its over-activity. A government officer might be induced by a bribe to harass an individual under colour of justice; he could not be compelled by the mere filing of a petition to involve those under his jurisdiction in all the vexations of a law suit. Even when bribed, he could not do much more than harass the individual; for the right to demand a jury was a bar to arbitrary decrees, and although he might reject or evade the demand, yet the frequent occurrence of a course so contrary to public opinion could not escape his superiors if at all inclined to do justice. The inertness of government was counteracted by various expedients which though objectionable in themselves supplied the place of better principles. These were private redress, patronage, and presents. If a man had something to demand from an inferior or an equal he placed him under restraint, prevented his leaving his house or eating, and even forced him to sit in the sun till he came to some agreement. If the debtor were a superior, the creditors had first recourse to supplications and appeals to the honour and sense of shame of the other party. He laid himself on his threshold, threw himself in his path, clamoured before his door, or employed others to do all this for him. He would even sit and fast before the debtor's door, and appeal to the gods and invoke their curses upon the person by whom he was injured. It was a point of honour with the people not to disturb the authors of these importunities, so long as they were just, and some satisfaction was generally procured by their means. If they were unjust, the party thus harassed naturally concurred with the plaintiff in the wish for a jury, and thus an object was obtained which might not have been gained from the indolence of the magistrate. Standing before the residence of the great man, assailing him with clamour, holding up a torch before him by daylight, pouring water without ceasing on the statues of the gods, all these extreme measures when resorted to seldom failed to obtain a hearing even under Bajiray, and then was the

still more powerful expedient both for recovering a debt of for obtaining justice, to get the whole caste, village, or trade to join in performing the above ceremonies until the demand of one of its members were satisfied. The next means of obtaining justice was by patronage. If a poor man had a master, a landlord, a great neighbour or any great connexion, or if he had a relation who had a similar claim on a great man, ho could interest him in his favour and procure his friendly intercession with the debtor, his application to the friend's pf the debtor, or his interest with the public authority to obtain justice for his client. This principle was not so oppressive as it seems at first sight, or as it must have been had it been partial; for it was so widespread that scarcely any man was without some guardian of his interests. Both sides in a cause were brought nearly equal and the effect of the interference of their patrons was to stimulate the system which might otherwise have stood still. If this resource failed, a present or the promise of a present to the public authority or those who had weight with him would be efficacious. The fee of one-fourth of all property gained in law suits was in fact a standing bribe to invite the aid of the magistrate. The number of persons who could grant panchayats also expedited business. Besides the *nyayadhish* and the numerous *mamlatdars* and *jagirdars*, many people of consequence could hold juries under the express or implied authority of the Peshwa, and every chief settled the disputes of his own retainers, whether among themselves or with others of the lower or middle classes. A great number of disputes were also settled by private arbitration, and their proceedings in the event of an appeal were treated by the government with the same consideration as those of juries held under its own authority.

Thus some sort of justice was obtained and it was less impure than might be expected from the sources from which it was supplied. Public opinion and the authority of the magistrate set bounds to dunning and the institution of the jury was a restraint on patronage and bribery. The jury itself, though unfitted to settle any but village causes, had many advantages. Though each might he slow, the number that could sit at a time even under the superintendence of one person must have enabled them to decide many causes. The intimate acquaintance of the members with the subject in dispute and in many cases with the character of the parties must have made their decisions frequently correct; and it was an advantage of incalculable value in that mode of trial that the judges being drawn from the body of the people could act on no principles that were not generally understood, a circumstance which by preventing uncertainty and obscurity in the law struck at the very root of litigation. The liability of the juries to corruption was checked by the circumstance that it did not so frequently happen to one man to be a member as to make venality profitable, while as the parties and the members were of his own class the receiver of bribes was much exposed to detection and loss of character. Accordingly, even after the corrupt reign of Bajirav, juries appear to have kept the confidence of the people in a great degree and they seem to have been not unworthy of their good opinion. According to Mr. Chaplin their statement of the evidence was short and clear, their reasoning on it solid and sensible, and their decision, as a rule, just and fair. Their grand defect was delay. To prevent delay the suitors had recourse to the same remedies as they used to people in power, importunity, intercession of patrons, and sometimes no doubt to promises, fees, and bribes.

It is impossible to form clear notions on the general result of this administration, either as to its despatch of causes, the degree of justice administered, or its effect on the character of the people. Mr. Elphinstone believed that simple causes were speedily decided and complicated cases slowly. The nyayadhish usually tried com plicated cases. In twenty years he had less than 1400 causes filed, of which it was believed one-half were never decided. Panchayats appear generally to have given just decisions, but men in power could obstruct a reference to those assemblies and could prevent the executions of their decrees. That justice was often denied and injustice committed appears from the frequency of thalli, which was a term for robbery, arson, and murder, committed to force a village or a government officer to satisfy the claims of the perpetrator. Murders on account of disputes about landed property were every where frequent. With regard to its effect on the character of the people, the landholders seemed in most respects simple and honest. At the same time there was no regard for truth and no respect for an oath throughout the whole community, and forgery, intrigue, and deceit were carried to the highest pitch among the patils, kulkarnis and all who had much opportunity of practising those iniquities. There was no punishment for perjury or forgery. Litigiousness did not seem to have been prevalent, unless the obstinacy with which people stuck to claims to landed property could be brought under the head of litigiousness.

[Elphinstone's Report (1819), 36 - 40.] The power of administering criminal justice was vested in the revenue officers and varied with their rank from the *patil*, who could put a man for a few days in a village office to the sarsubhedar, who in Bajirav's days had the power of life and death. Formerly powers of life and death were confined to persons invested with the *mutaliki* seal and to great military chiefs in their own armies or their own estates. At the same time the right of inflicting punishment was undefined, and was exercised by each man more according to his influence than according to his office. One patil would flog and fine and put in the stocks for many weeks, while another would not even venture to imprison. Most mamlatdars would hang a Ramoshi, Bhil, or Mang robber without a reference, and those at distance would exercise their power without scruple, while the highest civil officers, if at Poona, would pay the Peshwa the attention of applying for his sanction in all capital cases. A chief was thought to have authority over his own troops and servants wherever he was. [Sindia while he affected to act under the Peshwa put many of his chiefs and ministers, even Brahmans, who had been accused of plots, to death. Appa Desai, while completely in the Peshwa's power, in 1813, blew away one of his Sardars from a gun for conspiracy against him and was never questioned though the execution took place within one mile of Poona.]

There was no prescribed form of trial. They seized men on slight suspicion, gave way to presumptions of guilt, forced confessions by torture, and inflicted punishments which, although they were inhuman or rather because they were inhuman, were effectual in striking terror. A rebel or a head of banditti would be executed at once on the ground of notoriety. Any Bhil caught in a part of a district where Bhils were plundering the road would be hanged forthwith. In doubtful cases the chief authority would order some of the people about him to inquire into the affair. The prisoner was examined, and if suspicions were strong, he was flogged to make him confess. Witnesses were examined and a summary of their evidence and of the statement of the accused were always taken down

in writing. Witnesses were sometimes confronted with the accused in the hope of shaming or perplexing the party whose statement was false; but this was by no means necessary to the regularity of the proceedings. The chief authority would generally consult his officers and perhaps employ a committee of them to conduct an inquiry. It is doubtful if juries were ever generally employed in criminal trials. [Captain Grant mentions that juries were employed in criminal cases in Satara.]

In crimes against the state, the prince made or directed his ministers to make such inquiries as seemed requisite for his own safety and gave such orders regarding the accused as their case seemed to require. Torture was employed to compel confession and the disclosure of accomplices. Trials for treason were considered above law, but even in common trials no law seems ever to have been referred to, except in cases connected with religion, where shastris or divines were sometimes consulted. The only rule seems to have been the custom of the country and the magistrate's idea of expediency. The Hindu law was quite disused, and although every man was tolerably acquainted with its rules in civil cases, no one but the very learned had the least notion of its criminal enactments. Murder, unless attended with peculiar atrocity, appears never to have been a capital offence, and was usually punished by fine. Highway robbery was generally punished with death as it was generally committed by low people. A greater distinction was made in the punishment on account of the caste of the criminal than on account of the nature of the crime. A man of fair caste was seldom put to death except for offences against the state. In such cases birth seems to have been no protection, [Vithoji the full brother of Yashvantrav Holkar was trampled to death by an elephant for rebellion, or rather for heading a gang of predatory horse, and Sayaji Athavle, a dispossessed jagirdar, was blown away from a gun for the same offence.] yet treason and rebellion were thought less heinous offences than with the British. This originated in a want of steadiness, not of severity, in the government. When it suited a temporary convenience, an accommodation was made with a rebel, who was immediately restored not only to safety but to favour. [Balkrishna Gangadhar received a *jagir* for the same insurrection for which Vithoji Holkar was put to death. Vishvasrav Ghatge, who headed a large body of plundering horse, was treated with much favour by the Peshwa, but Abdulla Khan, a relative or the Nawab of Savanur, who committed the same offence at a subsequent period, was blown away from a gun.] The other punishments were hanging, beheading, cutting to pieces with swords, and crushing the head with a mallet. Punishments, though public, were always executed with little ceremony or form. Brahman prisoners who could not be executed, were poisoned or made away with by unwholesome food such as bread made of equal parts of flour and salt. Women were never put to death; long confinement, and cutting off the nose ears and breasts were the severest punishments inflicted on women. Mutilation was very common, and the person who had his hand, foot, ears, or nose cut off was turned loose as soon as the sentence was executed and left to his fate. Imprisonment in hill forts and in dungeons was common and the prisoners, unless they were people of consideration, were always neglected and sometimes allowed to starve. Prisoners for theft were often whipped at intervals to make them discover where the stolen property was hidden. Hard labour, especially in building fortifications, was not unknown, but like most ignominious punishments was confined to the lower orders. Branding with a hot iron is directed by the Hindu law but is not known to have been practised. Flogging with a

martingale was very common in trifling offences like petty thefts. The commonest of all punishments was fine and confiscation of goods, to which the mamlatdar was so much prompted by his avarice that it was often difficult to say whether it was inflicted as the regular punishment or merely made use of as a pretence for gaining wealth. On the one hand it seems to have been the Maratha practice to punish murder especially if committed by a man of good caste by fine; on the other the mamlatdars would frequently release Bhil robbers contrary to the established custom, and even allow them to renew their depredations on the payment of a sum of money. It may be averred that no other punishment was ever inflicted on a man who could afford to pay a tine. On the whole the criminal system of the Marathas was in the last state of disorder and corruption. Judging from the impunity with which crimes might be committed under such a system of criminal justice and police the crimes were not particularly numerous. [Mr. Elphinstone thus accounts for this rarity of crime in the Maratha country. The people were few compared to the quantity of arable land. They were hardy warlike, and always armed. The situation of the lower orders was very comfortable and that of the upper prosperous. There was abundance of employment in the domestic establishments and foreign conquests of the nation. The ancient system of police was maintained; all the powers of the state were united in the same hands and their vigour was not checked by any suspicions on the part of the government or any scruples of their own. In cases that threatened the peace of society apprehension was sudden and arbitrary, trial summary, and punishment prompt and severe. The innocent might sometimes suffer, but the guilty could scarcely ever escape. As the magistrates were natives they readily understood the real state of a case submitted to them and were little retarded by scruples of conscience, so that prosecutors and witnesses had not long to wait. In their lax system, men knew that if they were right in substance, they would not be questioned about the form, and perhaps they likewise knew that if they did not protect themselves they could not always expect protection from the magistrate, whose business was rather to keep down great disorder than to afford assistance in cases that might be settled without his aid. The *mamlatdars* were themselves considerable persons and there were men of property and consideration in every neighbourhood, inamadars, jagirdars, and old jamindars. These men associated with the ranks above and below them and kept up the chain of society to the prince. By this means the higher orders were kept informed of the situation of the lower, and as there was scarcely any man without a patron men might be exposed to oppression but could scarely suffer from neglect.] Murder for revenge, generally either from jealousy or disputes about landed property and as frequently about village rank, is mentioned as the commonest crime among then Marathas. Gang and highway robberies were common but were almost always committed by Bhils and other predatory tribes who scarcely formed part of the society.

Under the Marathas [Elphinstone's Report, 25th October 1819, 34-35.] the *patil* was responsible for the police of his village. He was aided by the accountant and by the *chaugula* or assistant headman, and, when the occasion required it, by all the villagers. His great and responsible assistant in matters of police was the village watchman, the Mhar. Though there was only an allowance for one watchman in a village, the family had generally branched into several members who relieved and aided each other. The duties were to keep watch at night, to find out all arrivals and departures, watch all strangers,

and report all suspicious persons to the headman. The watchman was likewise bound to know the character of each man in the village and when a theft was committed within village bounds, it was his business to find the thief. He was enabled to do this by his early habits of inquisitiveness and observation, as well as by the nature of his allowance, which being partly a small share of the grain and similar property belonging to each house, he was kept always on the watch to ascertain his fees and always in motion to gather them. When a theft or robbery happened the watchman began his inquiries and researches. It was very common for him to track a thief by his footsteps and if he did this to another village so as to satisfy the watchman there, or if he otherwise traced the property to an adjoining village his responsibility ended and it was the duty of the watchman of the new village to take up the pursuit. The last village to which the thief had been clearly traced became answerable for the property stolen, which would otherwise have fallen on the village where the robbery was committed. The watchman was obliged to make up this amount as far as his means went and the remainder was levied on the whole village. Only in particular cases was the restoring of the value of the property insisted on to its full extent. Some fine was generally levied and neglect or connivance was punished by transferring the grant or *inam* of *the patil* or watchman to his nearest relation, by fine, by imprisonment in irons, or by severe corporal punishment. This responsibility was necessary, as, besides the usual temptation to neglect, the watchman was himself a thief, and the patil was disposed to harbour thieves with a view to share their profits. Besides the regular village watchman, others were often entertained from the plundering tribes in the neighbourhood. Their business was to aid in meeting open force, and to help in apprehending offenders, but chiefly to prevent depredations by members of their own tribe and to find out the perpetrators when any did occur.

In police matters as in revenue affairs the *patil* was under the *mamlatdar*, who employed the same agents in the police as in the revenue department. The *mamlatdar* saw that all villagers acted in concert and with proper activity. The *sarsubhedar* kept the same superintendence over the *mamlatdars*. These officers had also considerable establishments to maintain the peace of the district. *Shibandis* or irregular infantry and small parties of horse were employed to oppose violence and support the village police. With the *mamlatdars* also rested all general arrangements with the chiefs of predatory tribes either in forbearing from plunder themselves or for aid in checking plunder in others. The *mamlatdar* had great discretionary powers and even a *patil* would not hesitate to secure a suspected person or to take any measure that seemed necessary to maintain the police of his village for which he was answerable.

This system of police was kept up to the time of Nana Fadnavis (1774-1800) and is said to have succeeded in preserving security and order. The confusion in the beginning of the last Peshwa's reign, the weakness of his own government, the want of employment for adventurers of all kinds, and the effects of the 1803-4 famine greatly deranged the system of police. To remedy the disorders into which it fell, an office was instituted under the name of *tapdsnavis* or inspector, whose special duty was to discover and seize offenders. The *tapasnavis* had a jurisdiction entirely independent of the *mamlatdars* and had a body of horse and foot which was the principal instrument of their administration. They had also Ramoshis and spies, whom they employed to give information and on receiving it

they went with a body of horse to the village where the theft happened and proceeded to seize the patil and the watchman and to demand the thief or the amount of the property stolen or the fine which they thought proper to impose if the offence were any other than theft. The detection of the offender they seen to have left in general to the ordinary village police. There were constant and loud complaints by the *mamlatdars* and villagers that the tapasnavises were active only in extorting money under false accusations and that robbers flourished under their protection. The tapasnavises on the other hand complained of indifference, connivance, and opposition of villagers and revenue officers. Great abuses are stated to have at all times existed even under the regular system. Criminals found refuge in one district when chased out of another. Some jagirdars and jamindars made a trade of harbouring robbers, and any offender, it is said, could have bought his release if he had money enough to pay for it. False accusations were likewise made a cloak for exaction from the innocent, and villagers were obliged to pay the amount of plundered property in the loss of which they had no share and for which the losers received no compensation. [There cannot be a stronger proof of the enormous abuses to which the form police was liable than is furnished by an occurrence under the eye of government in the days of Nana Fadnavis. There was at that time a kotval in the city Poona called Ghashiram, a native of Northern India, who was much trusted and to a high position. This man was convicted of having for many years employed powers of the police in murders and oppressions which the natives illustrate by stories far beyond belief. His guilt was at length detected and excited such indignation that though a Brahman it was decided to punish him capitally. He was led through the city on a camel and then abandoned to the fury of the people who stoned him to death.]

In Bajirav's time, £900 (Rs.9000) a month was allowed to the officer who had charge of the police at Poona. From this he had to maintain a large staff of constables, some horse patrols, and a considerable number of Ramoshis. He was answerable for the amount of property plundered whenever the Peshwa thought proper to call on him. Still his appointment was reckoned lucrative as the pay of his establishment was very low, and both he and they derived much profit from unavowed exactions. The city police was nevertheless good. On the whole murders or robberies attended with violence and alarm were rare and complaints of the insecurity of property were never heard.

BRITISH 1817-1884.

After the British conquest (1817), to prevent sudden and extensive changes, the judicial administration of Poona along with other Deccan districts was till 1827 under the orders of the Governor in Council. Subject to the Comissioner Mr. Elphinstone, Captain Henry Dundas Robertson was appointed Collector of revenue, Judge, and Magistrate of the Poona district, whose authority nearly resembled that of the great *sarsubhedars* under the Peshwa's government. Experienced natives were appointed to fill the numerous subordinate posts with permanent salaries, on a scale of liberality which rendered their offices both in regard to power and emolument exceedingly respectable. To protect and conciliate the people, to attempt no innovations, and to endeavour to show to the people that they were to expect no change but the better administration of their own laws were the primary objects to which the Commissioner directed the attention of the Poona as

well as of the other Deccan Collectors. [Grant Duffs Marathas, 679.] All the great estate-holders or *jagirdars* were allowed to continue to use within their own territory the powers they had always enjoyed. Even towards those chiefs who had lost their lands, great delicacy and as little interference as possible were enjoined. The equitable and enlightened law which levels all distinctions would have been intolerable to men's minds in the existing state of the Maratha country and would have been as little relished by the lower as by the high classes of society. [Grant Duff's Marathas, 684,]

The jury or *panchayat* was directed to be considered the main instrument of civil judicature, all suits being referable to these tribunals, whose decisions were final except in cases where corruption or gross partiality might be proved or where the award itself was grossly unjust. An appeal in all cases was allowed to either party. When an appeal was made the Collector was instructed to examine the proceedings of the panchayat and to institute such further inquiries as the case might call for. When no appeal was made the decree of the panchayat was to be enforced. Revision of panchayat decisions was discountenanced as not necessary or proper except in cases of gross error, corruption, or injustice; and with a view to prevent delay in the execution of awards the Commissioner declared that he would not receive appeals or interfere with decisions any further than might be necessary for the purpose of ascertaining that the general rules on which judicial proceedings were conducted had not been infringed. The Collector had five judicial amins employed in the city of Poona where from the extent of the population and the spirit of litigation which prevailed the demand for justice was particularly heavy. In June 1822 mamlatdars were empowered to decide causes to the amount of £10 (Rs. 100). The amins, besides deciding causes themselves, aided juries by recording and shaping their proceedings and generally in forming and superintending these courts of arbitration. There were not many appeals from the *amins'* decisions, and they stood fair in point of integrity, though they required to be kept under a vigilant superintendence. They did not appear to be popular among Sardars, whose dislike, no doubt, arose from their occasionally arrogating to themselves an authority which native gentlemen, unaccustomed to the equality of judicial rules of procedure, could ill brook from persons whom they considered so much their inferiors. The period within which suits for debt and personal property might be entertained was limited as in other Deccan districts to twentyfour years, and it extended agreeably to the custom of the country to seventy years for claims founded on the mortgage of *vatans*. No time was fixed after which appeals were not received, nor were appellants in general compelled to enter into bonds for the payment of a fine if their complaint proved frivolous, though this was done in some few instances when the complaint was suspected to be vexatious. Decrees were executed in the usual manner by distraint of property and personal restraint; if necessary, houses were sometimes sold, but the implements of trade were usually spared unless no other property was forthcoming. No definite rules were established in regard to the period of imprisonment for debt if the debtor failed to satisfy the demand upon him. Creditors requiring the confinement of debtors paid them subsistence money [Chaplin's Report (1822), 70.] After the appointment of a Registrar, the returns both civil and criminal were regularly furnished. The supply of justice appeared pretty nearly to keep pace with the demand in all ordinary cases, but a few in which Sardars were concerned were shamefully protracted by the delays and impediments which the people knew so well how

to oppose to the adjustment of their differences. In 1819-20 the agitation of old debts and claims that had their origin during the late government and were in fact an arrear of the Peshwa's file, brought an accumulation of 4603 suits. Of these 241 were settled by *panchayat*, 461 by *rajinama*, forty-one by decree of court, and 774 by *amins* and mamlatdars, being an aggregate of 1517 causes adjusted, besides 2721 dismissed from the non-attendance of plaintiffs. The total disposed of amounted to 4238 and the balance on the file was 365. In the following year (1820-21), the file including those undecided, comprehended 3122 suits of which 113 were settled by *panchayat*, 568 by *rajinama*, thirteen by decree of court, and 682 by *amins* and mamlatdars, making a total of 1376 causes determined exclusive of 470 which went by default. The number remaining on the file at the expiration of the year was 1276. In 1821-22 the file consisted of 5708 suits. Of these 170 were decided by *panchayat*, 372 by mutual agreement, five by decree of court, and 761 by *amins* and mamlatdars, making a total of 1308.

The only innovations in criminal justice introduced by the British were closer superintendence and the prohibition of the indefinite confinement of suspected persons by the *patils* and mamlatdars. There was more system, more scruples, more trials, more acquittals, more certain punishments for all crimes except robbery and for that both less certain and less severe. The power of punishing was taken from the patil and that which was left to the mamlatdar was limited to a fine of 4s. (Rs. 2) and confinement for twentyfour hours. The powers of the Collectors were not less than those of a sarsubhedar except in the article of inflicting capital punishment, but his manner of exercising his power was altogether different. A prisoner was formally and publicly brought to trial. He was asked whether he was guilty, and if he admitted his guilt pains were taken to ascertain that his confession was voluntary. If he denied his guilt witnesses were called without further inquiry. They were examined in the presence of the prisoner, who was allowed to crossexamine them and to call witnesses in his own defence. If there was any doubt when the trial was concluded he was acquitted. If he was clearly guilty, the *shastri* was called on to declare the Hindu law. It often happened that this law was unreasonable and when the error was on the side of severity it was modified, when on the side of lenity it was acquiesced in. The law officers were always present at those trials. When the trial was ended and the sentence passed, in cases of magnitude it was reported for confirmation to the Commissioner, where the same leaning to the side of lenity was shown as in the court itself. The punishments awarded by the *shastris* were: death, which was executed in cases of murder, and sometimes robbery accompanied with attempts to murder; mutilation, which was commuted into imprisonment with hard labour; and simple imprisonment, which was carried into effect. Women were never put to death, nor Brahmans except in cases of treason. When the guilt of the accused was not proved very great caution had been enjoined in imprisoning him on suspicion. It had indeed been recommended that no person should be so imprisoned unless a notorious leader of banditti, and when any person did happen to be imprisoned for want of security the period at which he was to be released was directed to be fixed. The whole of this system was evidently better calculated for protecting the innocent from punishment and the guilty from undue severity than for securing the community by deterring from crimes.

During the first years of British rule, the Poona criminal file was usually heavy and the magisterial department was alone sufficient to occupy the undivided attention of one of the Collector's assistants, aided occasionally by the Collector himself and the Registrar. In 1821 there were fewer cases of murder than in either of the preceding two years, of gang robbery the number of commitments was greater but the convictions fewer. Of burglary there were no cases, which was rather an extraordinary circumstance, but it seems to be owing to the crime having been otherwise classed probably under the cases of considerable theft, which were very numerous, there having been eighty-five commitments and seventy-eight convictions on this account. Receiving stolen property seemed to be also an offence that was increasing. Petty thefts were also very prevalent, with 463 commitments and 307 convictions. The aggregate of crime was prodigiously great. There were 793 convictions out of 1278 commitments in 1821. This was accounted for by the thieving propensities of the Ramoshis and the vicious habits of the lower orders of a large town like Poona where many persons were out of employment and destitute of visible means of livelihood. The returns of heinous crimes committed during the three years ending 30th June 1822 exhibited fifty-four cases of which the perpetrators were not found. Of these two-thirds were burglaries and gang robberies and the rest apparently cases of murder. The number of capital trials, convictions, and executions during the three years commencing with 1st July 1819 was as follows:

Poona Capital Offences, 1819-1822

| 1819-20. 1820-21. | | | | | 21. | | 1821-22 | 2. | | Total. | |
|-------------------|----------------|---------------|-------|----------------|----------|-------|----------------|---------------|-------|----------------|---------------|
| Tried | Convi- cted | Exec- uted | Tried | Convi- cted | Executed | Tried | Convi- cted | Exec- uted | Tried | Convi- cted | Exec- uted |
| 6 | 5 | 3 | 20 | 20 | 2 | 14 | 10 | 2 | 40 | 35 | 7 |

A few months after the *Adalat* had been in existence it was found unable to cope with the work. Some additional machinery became necessary and the following three courts were established in addition to the Adalat, one for the trial of original cases of importance and of appeals, consisting of shastris presided over by a magistrate; one for the trial of all cases valued below a certain sum instituted by persons of rank over whom alone it had jurisdiction; and one for the trial of all petty suits and for the investigation of trifling offences. The Adalat settled all inferior disputes with the aid of juries subject to an appeal to the Collector. Minor offences and minor civil matters in the district were settled by revenue officers or mamlatdars with the aid of juries assembled under their authority subject to an appeal; all serious criminal complaints were enquired into by the Collector's assistants with the aid of shastris. In 1820 Government issued orders directing among other things that the trial of criminal cases by juries should be discontinued as being inconsistent with former usage and unattended with important advantages, that the administration of civil justice by juries be untrammelled by forms and regulations which threw over the institution a mystery which enabled litigious people to employ courts of justice as engines of intimidation against neighbours and which raised a necessity for the

employment of lawyers, and that claims against Sardars should be preferred to the Commissioner. In 1822 it was found that justice could not be administered as regularly as was desirable in consequence of the Collector having other multifarious and important duties to perform. An officer termed a Registrar was therefore appointed with a view to secure more regularity and accuracy in the administration of justice and in the preparation of judicial documents. He had to superintend and do such judicial work, especially civil, as the Collector might by general or special orders entrust to him. In fact he was the Collector's judicial assistant. In 1823 the mamlatdars were relieved of their judicial duties and courts presided over by munsiffs were established at Shivner, Purandhar, Khed, Pabal, Bhimthadi, and Haveli. Besides these there were in the city of Poona the courts of the first and second Registrars, a sar-amin, and four amins. The munsiffs were empowered to try all cases not specially excepted without obtaining the previous consent of the parties. The jury system was limited to certain classes of suits unless the parties specially desired that mode of trial. Greater strictness and regularity of procedure were introduced and greater facilities were afforded for appeal from the decisions of munsiffs and juries. In 1825 a civil and criminal Judge was for the first time appointed and the Collector was relieved of all judicial work except magisterial. [In 1825 Bishop Heber wrote: The Collector was Judge of circuit or Magistrate. Offences were tried and questions of property decided in the first instance by *panchayats* or native juries assembled in the villages under the hereditary head. The more difficult cases were decided by native *pandits* with handsome salaries at Poona and other great towns. Their decisions were confirmed or revised by the Commissioner. The system of trying questions in the first instance by village juries or panchayats and difficult cases by pandits in Poona under the supervision of the Commissioner was on the whole satisfactory. There were many complaints of the list-lessness, negligence, and delays of the arbitrators. But the delay was less than the delay of the regular courts or Adalats in other parts of India, and as far as integrity went the reputation of the arbitration courts was far better than that of the regular courts. Journal, II. 210.] The Sholapur collectorate was placed under the charge of the Judge with a senior assistant judge, with civil and criminal powers, at the detached station of Sholapur. In 1826 the Commissionership was abolished. The general supervision and control exercised by the Commissioner over the administration of justice in the Deccan was transferred to the Judges of the Sadar Divani and Faujdari Adalat, who were designated Commissioners of civil and criminal justice in the last resort for the Deccan. Two lists of each of the three classes of Sardars were made, one showing the names of Sardars whom it was proposed to exempt from judicial processes in civil cases and the other showing those of the Sardars proposed for exemption from processes in criminal cases. Rules were also framed for the guidance of officers entrusted with the duty of dealing with Sardars' claims. In 1827 the old system of judicature was remodelled and made applicable to the Deccan, which included the Poona district, and native commissioners were appointed to decide civil suits between £50 and £500 (Rs. 500 - 5000) where the parties were neither Europeans nor Americans. The Zilla Judge was made criminal judge for the trial of certain offences of a heinous nature, the assistant judge was also made assistant criminal judge, and the senior assistant judge was invested with powers of a criminal judge. The Collector and his assistants were made district and assistant magistrates. In 1828 the court of the Agent for Sardars was established under Regulation XXIX of 1827 with a deputy agent to take cognizance of

claims against Sardars. The office of the deputy agent was abolished in 1834 and that of the assistant agent created in 1835. In 1830 the jurisdiction of native commissioners was extended to the cognizance of all suits where the parties were neither Europeans nor Americans. The designation of criminal judge and assistant criminal judge was changed to Sessions Judge and assistant sessions judge with extended powers. In 1831 the office of native commissioners was ordered to comprise three grades, and the officers holding them were directed to be styled respectively native judges, principal native commissioners, and junior native commissioners. The jurisdiction of the first in original suits was unlimited, the jurisdiction of the second extended to suits of a value not exceeding £1000 (Rs. 10,000), and of the third to £500 (Rs. 5000). Besides the courts of the Judge, assistant judge, Sadar Amins, and five native commissioners at Poona, there were in the District civil courts at Junnar, Ausari, Indapur, Kivle, Sasvad, and Talegaon. In 1836 these officers were ordered to be styled respectively Principal Sadar Amin, Sadar Amins, and munsiffs and their jurisdiction was extended to Europeans and Americans. In 1838 there were three courts in the district at Talegaon, Junnar, and Chakan, and in 1841 there were four courts at Talegaon, Junnar, Chakan, and Indapur. In 1842 the subcollectorate of Sholapur was made into a collectorate and a judge and sessions judge was appointed to it. In 1848 there were five courts in the district at Baramati, Junnar, Talegaon, Khed, and Vadgaon. In 1861 assistant magistrates were directed to be called Full-power Magistrates, Subordinate Magistrates First Class, and Subordinate Magistrates Second Class, and the system of trial with the aid of assessors was introduced. In 1862 the court at Baramati was removed to Patas. In 1865 a Small Cause Court was established at Poona with final jurisdiction up to £50 (Rs. 500) and a Registrar's court at Vadgaon. In 1866 the collectorate of Sholapur was again formed into a sub-collectorate with a senior assistant judge. In 1867 the system of trial by jury in criminal cases was introduced. In 1869 the designation of Principal Sadar Amin was changed into a First Class Subordinate Judge and that of Sadar Amins and munsiffs into Second Class Subordinate Judge. In 1872 the Full-power Magistrates and Subordinate Magistrates First Class and Subordinate Magistrates Second Class were directed to be styled respectively first class magistrates, second class magistrates, and third class magistrates. In 1880 two more courts were established at Indapur and Sasvad for the purpose of the Deccan Agriculturists' Relief Act to bring justice nearer the homes of the people. In 1883 the jurisdiction of the Small Cause Court Judge was raised to £100 (Rs. 1000).

CIVIL COURTS, 1884.

At present (1884) the district has a District and Sessions Judge stationed at Poona and eight subordinate judges. Of the sub-judges, one stationed at Poona, a first class sub-judge has jurisdiction over the city of Poona and the Haveli subdivision with an area of 813 square miles and 287,062 population; a second at Junnar has jurisdiction over the Junnar sub-division with an area of 611 square miles and 102,273 population; a third at Khed over the Khed subdivision with an area of 888 square miles and 141,890 population; a fourth at Talegaon (Dhamdhere) over the Sirur sub-division with an area of 577 square miles and 72,793 population; a fifth at Patas over the Bhimthadi sub-division with an area of 1037 square miles and 110,428 population; a sixth at Indapur over the

Indapur sub-division with an area of 567 square miles and 48,114 population; a seventh at Sasvad over the Purandhar sub-division with an area of 470 square miles and 75,678 population; and an eighth at Vadgaon over the Maval sub-division with an area of 385 square miles and 62,383 population. There is also under the Deccan Agriculturists' Relief Act, besides a special judge for the whole of the Deccan, a first class sub-judge for the Poona and Satara districts. The average distance of the Poona first class sub-judge's court from its furthest six villages is thirty-six miles; of the Junnar court twenty-four miles; of the Khed court twenty-one miles; of the Talegaon court twenty-seven miles; of the Patas court twenty-eight miles; of the Indapur court twenty-two miles; of the Sasvad court eighteen miles; and of the Vadgaon court eighteen miles. The area of the jurisdiction of the Small Cause Judge's court is 308 square miles and of the Vadgaon Registrar's court 560 square miles.

CIVIL SUITS 1870-1882.

During the thirteen years ending 1882, the average number of suits decided was 8167. Except in 1875 when it fell to 9035 from 9656 in 1874, during the six years ending 1876 the totals gradually rose from 7705 in 1870 to 12,116 in 1876. During the next four years ending 1880, the totals gradually fell from 9187 in 1877 to 5436 in 1880. During the last two years there was an increase, in 1881 to 5870 and in 1882 to 6501. Of the total number of cases decided, fifty-three per cent were on an average given against the defendant in his absence. The number of this class of cases varied from 6998 in 1876 to 560 in 1881. Of contested cases, during this period of thirteen years, an average of 1610 per cent have been decided for the defendant, the percentage varying from 22.50 in 1880 to 11.54 in 1875. As regards the execution of decrees, no records are available for the eight years ending 1882. In 196 or 2.02 per cent of the suits decided in 1874 the decree was executed by putting the plaintiff in possession of the immovable property claimed. In 5861 or 60.69 per cent of the 1874 decisions decrees were executed by the attachment or sale of property. Of these 5244 or 54.30 per cent were executed by the sale of immovable property and 617 or 639 per cent by the sale of movable property. The number of attachments or sales of immovable property varied from 5244 in 1874 to 2444 in 1871 and of movable property from 747 in 1873 to 365 in 1872. During the five years ending 1874 the number of decrees executed by the arrest of debtors varied from 428 in 1872 to 306 in 1870. The following table shows that during the thirteen years ending 1882, except 1875 and 1876 the records for which years were destroyed by fire in 1879, the number of civil prisoners varied from 497 in 1873 to seventy-two in 1882.

Poona Civil Suits, 1870-1882.

| | SUITS FOR | | | AVERAGE VALUE | | UN | CONTESTE | ZD. | |
|------|------------------------------|-----------------|--------|-----------------------------|--------------------------|------------------------|------------------------|-----------------|--------|
| YEAR | THE RECOVERY OR DEBTS. | OTHER SUITS. | SUITS. | OF SUITS DISPOSED OR. | Decreed Ex- parte. | Dismissed Ex-parte. | Decreed on Confession. | Other. wise. | Total. |

| | | | | £ | | | | | |
|------|--------|------|---------|----------|--------|------|--------|--------|--------|
| 1870 | 6855 | 860 | 7705 | 16.17 | 5013 | 5 | 426 | 1157 | 6601 |
| 1871 | 6738 | 976 | 7714 | 20.09 | 4973 | 5 | 439 | 1119 | 6536 |
| 1872 | 7248 | 730 | 7978 | 13.02 | 5364 | 6 | 561 | 992 | 6923 |
| 1873 | 7729 | 1101 | 8830 | 18.00 | 5968 | 5 | 568 | 974 | 7515 |
| 1874 | 8088 | 1568 | 9656 | 15.10 | 6461 | 9 | 592 | 848 | 7910 |
| 1875 | | | 9035 | 16.14 | 5688 | 26 | 493 | 1130 | 7337 |
| 1876 | | | 12,116 | 9.18 | 6998 | 256 | 1308 | 1380 | 9937 |
| 1877 | | | 9187 | 13.04 | 4873 | 178 | 611 | 1781 | 7443 |
| 1878 | | | 8762 | 12.08 | 5410 | 171 | 779 | 948 | 7308 |
| 1879 | | | 8377 | 10.14 | 3982 | 396 | 1204 | 1057 | 6639 |
| 1880 | | | 5436 | 24.06 | 801 | 60 | 2082 | 1031 | 3974 |
| 1881 | | | 5870 | (a) 7.06 | 560 | 102 | 1004 | 1665 | 3331 |
| 1882 | | | 6501 | (a) 6.00 | 581 | 227 | 1085 | 1752 | 3645 |
| | 36,658 | 5225 | 106,167 | | 56,672 | 1446 | 11,147 | 15,834 | 85,079 |

| _ | | | · | | | | | | | | |
|---|-------|------------|------------|--------|--------|-----------------------|-------------------------|---------------------|----------|--|--|
| | | | CONTE | STED. | | EXECUTION OF DECREES. | | | | | |
| | YEAR. | For | For | Mixed. | Total. | Arrest | Possession by Decree | Attachment Prope | | | |
| | | Piainuiii. | Defendant. | | | Debtor. | Holder. | Immovable. | Movable. | | |
| | 1870 | 688 | 204 | 212 | 1104 | 306 | 245 | 2449 | 445 | | |
| | 1871 | 776 | 228 | 174 | 1178 | 333 | 245 | 2444 | 401 | | |
| | 1872 | 757 | 176 | 122 | 1055 | 428 | 217 | 2642 | 365 | | |
| | 1873 | 929 | 204 | 182 | 1316 | 348 | 243 | 4797 | 747 | | |
| | 1874 | 1203 | 292 | 251 | 1746 | 387 | 196 | 5244 | 617 | | |
| | 1875 | 1502 | 196 | | 1698 | | | | | | |
| | 1876 | 1874 | 305 | | 2179 | | | | | | |
| | 1877 | 1501 | 243 | | 1744 | | | | | | |
| | 1878 | 1231 | 223 | | 1454 | | | | | | |
| | 1879 | 1498 | 240 | | 1738 | | | | | | |

| 1880 | 1133 | 329 | | 1462 | | | | |
|------|--------|------|-----|--------|------|------|--------|------|
| 1881 | 2139 | 400 | | 2539 | | | | |
| 1882 | 2342 | 514 | | 2856 | | | | |
| | 17,573 | 3554 | 941 | 22,068 | 1802 | 1146 | 17,576 | 2575 |

(a) This represents average value of each suit instituted. *Poona Civil Prisoners*, 1870-1882.

| | | | | R | ELEASES | | |
|-------|------------|---------|---------------------|--------------------|--------------------|--------------------------------|------------------|
| YEAR. | PRESIONERS | DAYS. | Satisfying Decrees. | Creditors request. | No subsistence. | Disclosures of Property. | Time Expired. |
| 1870 | 320 | 24 | 26 | 96 | 157 | 8 | 10 |
| 1871 | 333 | 28 | 22 | 79 | 187 | 11 | 14 |
| 1872 | 427 | 25 | 27 | 101 | 242 | 10 | 21 |
| 1873 | 497 | 31 | 36 | 114 | 301 | 15 | 31 |
| 1874 | 461 | 31 | 24 | 112 | 249 | 31 | 23 |
| 1875 | | -1 | | | | - | |
| 1876 | 1 | - | 1 | 1 | | 1 | |
| 1877 | 238 | 26 | 19 | 73 | 124 | 20 | 2 |
| 1878 | 187 | 31 | 11 | 60 | 111 | 2 | 13 |
| 1879 | 164 | 27 | 8 | 35 | 113 | 1 | 5 |
| 1880 | 84 | 22 | 4 | 24 | 41 | 2 | 3 |
| 1881 | 82 | 27 | 4 | 30 | 40 | 1 | 7 |
| 1882 | 72 | 29 | 4 | 22 | 40 | 4 | 2 |
| Total | 2853 | 30 1 | 185 | 736 | 1605 | 105 | 131 |

continued..

| VEAD | EAR. PRESIONERS | DAYS. | CASTE. | | | | | | |
|--------|-----------------|-------|--------|-----------|--------|---------|--|--|--|
| I EAK. | PRESIONERS | DATS. | Hindus | Musalmans | Parsis | Others. | | | |

| 1870 | 320 | 24 | 301 | 16 | | 3 |
|-------|------|-----|------|-----|---|----|
| 1871 | 333 | 28 | 305 | 25 | | 3 |
| 1872 | 427 | 25 | 399 | 25 | | 3 |
| 1873 | 497 | 31 | 449 | 38 | | 10 |
| 1874 | 461 | 31 | 413 | 46 | | 2 |
| 1875 | | | | | | |
| 1876 | | | | | - | |
| 1877 | 238 | 26 | 221 | 16 | 1 | 1 |
| 1878 | 187 | 31 | 165 | 19 | 2 | 1 |
| 1879 | 164 | 27 | 139 | 23 | | |
| 1880 | 84 | 22 | 53 | 21 | | |
| 1881 | 82 | 27 | 71 | 11 | | |
| 1882 | 72 | 29 | 57 | 12 | 3 | |
| Total | 2853 | 301 | 2573 | 952 | 5 | 23 |

SMALL CAUSE COURTS.

The Poona Small Couse Court was established in 1865. During the thirteen years ending 1882 the average number of suits decided was 6589. During the five years ending 1874 the totals show alternate rises and falls, the lowest total being 7713 in 1870 and the highest 10,513 in 1874. During the next eight years the totals gradually fell from 6460 in 1875 to 3779 in 1882, with alternate falls and rises. Of the total number of cases decided, forty-five per cent have on an average been given against the defendant in his absence. The number of cases decided in this way varied from 5331 in 1873 to 1992 in 1882. Of contested cases, during this period of thirteen years an average of 10.66 per cent have been decided for the defendant, the percentage varying from 15.71 in 1879 to 2.26 in 1875, and the number Keeping above 200 in one year, 1873, and below 100 in 1875 and in the three years ending 1882. The average value of suits varied from £6 3s. (Rs. 61½) in 1878 to £5 5s. (Rs. 52½) in 1881. With regard to the execution of decrees the number of attachments of movable property varied from 888 in 1873 to seventy-two in 1881, and that of sales from 468 in 1873 to forty-eight in 1882. Of £21,220, the total value of suits disposed in 1882, £5113 or 24.09 per cent were put into the hands of the plaintiffs by the attachment or sale of the immovable property of the defendants. During the thirteen years ending 1882 the number of decrees executed by the arrest of debtors varied from 7756 in 1873 to 2423 in 1880. During the first three years the number rose and fell, the lowest number being 5777 in 1870 and the highest 6707 in 1871. During the next eight years the number gradually fell from 7756 in 1873 to 2423 in 1880; in 1881 it rose to 2601, and in 1882 it further rose to 2662. The following table shows that during the same thirteen

years (1870-1882) the number of Small Cause Court civil prisoners varied from 497 in 1873 to fifty in 1880.

The following statement shows in tabular form the working of the-Poona Small Cause Court during the thirteen years ending 1882:

Poona Small Cause Court Suits, 1870-1882.

| | | | | UNCO | NTESTED. | | |
|-------|--------|---------|---------------------|-----------------------|------------------------|------------|--------|
| YEAR | SUITS. | VALUE. | Decreed Exparte. | Dismissed Exparte. | Decreed on Confession. | Otherwise. | Total. |
| | | £ | | | | | |
| 1870 | 7713 | 44,089 | 4066 | 490 | 1332 | 589 | 6478 |
| 1871 | 8848 | 54,133 | 4606 | 492 | 1540 | 495 | 7133 |
| 1872 | 8643 | 51,730 | 4611 | 530 | 1589 | 349 | 7079 |
| 1873 | 10,513 | 57,981 | 5331 | 689 | 1711 | 506 | 8237 |
| 1874 | 8443 | 48,773 | 4015 | 277 | 1607 | 613 | 6512 |
| 1875 | 6460 | 36,142 | 2929 | 214 | 1427 | 697 | 5267 |
| 1876 | 5690 | 30,947 | 2409 | 188 | 1468 | 623 | 4688 |
| 1877 | 5745 | 33,199 | 2216 | 171 | 1523 | 730 | 4640 |
| 1878 | 5514 | 33,940 | 2232 | 219 | 1433 | 621 | 4505 |
| 1879 | 5873 | 33,946 | 2427 | 213 | 1548 | 603 | 4791 |
| 1880 | 4042 | 23,344 | 1275 | 127 | 1320 | 513 | 3235 |
| 1881 | 4394 | 28,275 | 1452 | 163 | 1345 | 564 | 3521 |
| 1882 | 3779 | 21,220 | 1092 | 143 | 1185 | 610 | 3030 |
| Total | 86,657 | 493,719 | 38,661 | 3913 | 19,029 | 7513 | 69,110 |

Poona Small Cause Court Suits, 1870-1882—continued.

| | | CONTES | TED. | | EXECUTION OF DECREE. | | | |
|-------|-------------------|----------------|--------|-------|----------------------|---------------------------------|--|--|
| YEAR. | For Plaintiff. | For Defendant. | Mixed. | Total | Arrest of Debtor. | Attachment or Sale of Property. | | |

| | | | | | | | | | | | Imm | ovable. | Movable |
|-------|--------------|----|--------|-------|------------|---|-----------------------|---|--------------|------|-----|------------------------------|----------------------------------|
| 1870 | 1060 |) | 1 | 22 | 53 | 3 | 1235 | , | 5 | 5777 | | | 5544 |
| 1871 | 1425 | i | 1 | 96 | 94 | 1 | 1715 | , | ϵ | 5707 | | | 6706 |
| 1872 | 1252 | 2 | 1 | 92 | 77 | 7 | 1521 | | 5 | 5783 | | | 7904 |
| 1873 | 1930 |) | 203 | | 143 | | 2276 |) | 7 | 756 | | | 10,094 |
| 1874 | 1682 | 2 | 1 | 57 | 62 | 2 | 1931 | | 7 | 447 | | | 9490 |
| 1875 | 973 | } | | 27 | 193 | 3 | 1193 | | 5 | 5762 | | | 7468 |
| 1876 | 703 | 3 | 1 | 13 | 186 | 5 | 1002 | , | 5 | 5571 | | | 7129 |
| 1877 | 682 | 2 | 1 | 54 | 269 |) | 1105 | | 4 | 1704 | | | 5436 |
| 1878 | 640 |) | 1 | 24 | 245 | 5 | 1009 |) | 3 | 3193 | | | 6563 |
| 1879 | 677 | ' | 1 | 70 | 235 | 5 | 1082 | , | 2 | 2662 | | | 7251 |
| 1880 | 503 | 3 | | 76 | 228 | 3 | 807 | 1 | 2 | 2423 | | | 5708 |
| 1881 | 574 | ļ | | 84 | 215 | 5 | 873 | | 2 | 2601 | | | 5426 |
| 1882 | 416 | 5 | | 92 | 241 | 1 | 749 |) | 2 | 2662 | | | 5113 |
| Total | 12,517 | ' | 17 | 10 | 2271 | [| 16,498 | , | 63 | ,048 | | | 89,824 |
| YEAR. | VA | LU | E OR S | SUITS | S. | | AVER <i>I</i> MOUN | | IN COST PER | | | PROC | RCIVE ESSES UED. |
| 12711 | Under £5. | £ | 5-20. | £20 | -50. | | TIGAT | | | | | Movable Property sold. | Movable Property attached. |
| | | | | | | £ | S. | | d. | s. | d. | | |
| 1870 | | | | - | · - | 6 | 14 | 3 | 3 1/3 | 16 | 5 | 424 | 236 |
| 1871 | | | | - | - | 6 | 2 | 4 | 1/8 | 17 | 7 | 463 | 320 |
| 1872 | | | | - | · - | 5 | 9 | 8 | 1/2 | 17 | 1 | 692 | 468 |
| 1873 | | | | - | | | 10 | 3 | 3/8 | 16 | 8 | 888 | 463 |
| 1874 | | | | - | | | 15 | 6 | 3/8 | 17 | 11 | 734 | 355 |
| 1875 | 9354 | 16 | 5,542 | 10,2 | 10,245 | | 11 | | 1 | 15 | 10 | 338 | 171 |
| 1876 | 7510 | 14 | ,958 | 84 | 78 | 6 | 9 | | 0 | 15 | 0 | 281 | 562 |
| 1877 | 8354 | 15 | ,340 | 95 | 03 | 6 | 15 | | 6 | 15 | 11 | 202 | 85 |

| 1878 | 8687 | 15,699 | 9554 | 6 | 3 | 1 | 16 | 11 | 193 | 117 |
|------|------|--------|------|---|----|----|----|----|-----|-----|
| 1879 | 9091 | 15,417 | 9437 | 5 | 15 | 7 | 15 | 11 | 242 | 133 |
| 1880 | 5401 | 10,124 | 7818 | 5 | 15 | 6 | 15 | 11 | 191 | 86 |
| 1881 | 5943 | 10,710 | 6621 | 5 | 5 | 11 | 14 | 11 | 72 | 60 |
| 1882 | 5236 | 9496 | 6488 | 5 | 12 | 2 | 15 | 10 | 85 | 48 |

Poona Small Cause Court Prisoners, 1870-1882.

| | | | | | | RELEASES | | |
|----------|----------|-------------|------|---------------------|-----------------------|--------------------|-------------------------|------------------|
| YEAR. | | PRESIONERS. | DATE | Satisfying Decrees. | Creditors Request. | No. Subsistance | Disclosure of Property. | Time Expired. |
| 1870 | 1870 320 | | 24 | 26 | 96 | 157 | 8 | 10 |
| 1871 | | 333 | 28 | 22 | 79 | 187 | 11 | 14 |
| 1872 | | 427 | 25 | 27 | 101 | 242 | 10 | 21 |
| 1873 | | 497 | 31 | 36 | 114 | 301 | 15 | 31 |
| 1874 | | 461 | 31 | 24 | 112 | 249 | 31 | 23 |
| 187 5 | (a) | | | | | | | |
| 187 6 | (a) | | | | | | | |
| 1877 | | 159 | 19 | 14 | 58 | 71 | 15 | 1 |
| 1878 | | 132 | 29 | 11 | 38 | 76 | 2 | 5 |
| 1879 | | 109 | 23 | 7 | 26 | 73 | | 3 |
| 1880 | | 50 | 24 | 3 | 20 | 26 | | 1 |
| 1881 | | 59 | 22 | 4 | 23 | 29 | | 3 |
| 1882 | | 56 | 24 | 4 | 20 | 29 | 1 | 2 |

continued..

| YEAR. | PRESIONERS. | DATE | CASTE. | | | | |
|-------|-------------|------|--------|-----------|--------|--------|--|
| ILAK. | rictioners. | DATE | Hindus | Musalmans | Parsis | others | |

| 1870 | 320 | 24 | 301 | 16 | | 3 |
|----------|-----|----|-----|----|---|----|
| 1871 | 333 | 28 | 305 | 25 | | 3 |
| 1872 | 427 | 25 | 399 | 25 | | 3 |
| 1873 | 497 | 31 | 449 | 38 | | 10 |
| 1874 | 461 | 31 | 413 | 48 | | 2 |
| 1875 (a) | | | | | | |
| 1876 | | | | | | |
| 1877 | 159 | 19 | 147 | 11 | | 1 |
| 1878 | 132 | 29 | 112 | 18 | 2 | |
| 1879 | 109 | 23 | 94 | 15 | | |
| 1880 | 50 | 24 | 35 | 15 | | |
| 1881 | 59 | 22 | 48 | 11 | | |
| 1882 | 56 | 24 | 46 | 8 | 2 | |

(a) The 1875 and 1876 figures are not available as the records were destroyed in the fire of Budhvar Vada on the 13th of May 1879.

The Cantonment Small Cause Court was established in 1859 under Act III. of 1859. The Cantonment Magistrate, as Judge of the Small Cause Court under section 1 of the said Act, is invested with jurisdiction to hear and determine actions for debt and other personal actions up to £20 (Rs. 200).

During the ten years ending 1882, the records for 1875, 1877, and 1879 being unavailable, the average number of suits decided was 1194. From 1453 in 1870 the number suddenly fell to 810 in 1871 and rose to 1048 in 1872. In 1873 the number suddenly rose to 1546 or 47.52 per cent from 1048 in 1872. Except in 1876 when the total was 1681, during the remaining five years the totals gradually dwindled from 1546 in 1873 to 816 in 1881. During these ten years suits to recover sums less than £5 varied from 1313 in 1873 to 557 in 1880 and suits to recover more than £5 and less than £20 varied from 656 in 1876 to 134 in 1871.

With regard to the execution of decrees, the number of sales of property varied from thirty-three in 1876 to nine in 1880. With slight variations, the number of debtors imprisoned dwindled from eighty-eight in 1870 to nothing in 1879. The details are:

Poona Cantonment Small Cause Court Details, 1870-1882.

| YEAR. | SUITES. | AVER-AGE AMOUNT IN | AVERAGE COST PER | COERCIVE PROCESSES ISSUED. | PERSONS IMPRISONED. |
|-------|---------|-----------------------|---------------------|-------------------------------|------------------------|
|-------|---------|-----------------------|---------------------|-------------------------------|------------------------|

| | Under £5. | £5-20. | LITIGA | ATION. | SUIT. | Movable property mortgaged. | Movable property sold. | |
|-------|-----------|--------|--------|--------|-------|-----------------------------|------------------------|-----|
| | | | £. | s. | S. | | | |
| 1870 | 1291 | 162 | 2 | 8 | 5 | | 24 | 88 |
| 1871 | 676 | 134 | 2 | 18 | 8 | | 11 | 61 |
| 1872 | 871 | 177 | 8 | 0 | 8 | | 15 | 65 |
| 1873 | 1313 | 233 | 3 | 10 | 6 | | 21 | 43 |
| 1874 | 1195 | 254 | 3 | 3 | 8 | | 25 | 57 |
| 1875 | | | | | | | | |
| 1876 | 1025 | 656 | 2 | 16 | 5 | | 33 | 41 |
| 1877 | | 1 | | 1 | - | | | |
| 1878 | | 1 | | 1 | - | | | |
| 1879 | 682 | 633 | 3 | 3 | 5 | | | |
| 1880 | 657 | 436 | 3 | 2 | 5 | | 9 | 9 |
| 1881 | 680 | 136 | 3 | 2 | 4 | | 14 | 1 |
| 1882 | 652 | 179 | 3 | 8 | 5 | | 10 | 5 |
| Total | 8942 | 3000 | | | | | 162 | 370 |

ARBITRATION COURT.

The Poona *lavad* or arbitration court was established on the 16th of January 1876, chiefly through the exertions of a Poona pleader the late Mr. Ganesh Vasudev Joshi. At a public meeting of the inhabitants of Poona eighty-two men belonging to most classes of the people were appointed arbitrators and of these one or more were to be chosen by the parties to a suit. Twenty of these have since died and eight new arbitrators have been added. The arbitrators receive no pay, but to defray the court expenses one per cent fee is levied on all claims up to £200 (Rs. 2000) and less than one per cent for higher claims, and service fee $1\frac{1}{2}d$. (1 a.) is charged for every two miles distance from the court, that is half of that charged by the Government civil courts. After the parties have consented to an arbitration the procedure is almost the same as that followed in the Government courts. The parties are allowed to employ pleaders and agents or *mukhtyars*. Judgment is given by a majority of votes. No appeal from the arbitrators' awards is allowed by law, except on the ground of fraud or of corruption. An agreement is passed by the parties to a suit before the arbitrators take up their case that they agree to abide by the arbitrators' awards. Between 1876 when the court was established and 1883, of 7511 suits filed, 2430 of the aggregate value of £60,124 (Rs. 6,01,240) have been decided by passing awards,

1339 by amicable settlement without passing awards, and 3742 in other ways. During the three years ending 1878, 3897 or on an average 1299 suits were filed; but since 1879 the number has varied between 655 in 1882 and 789 in 1879, and averaged 722. The decrease is said to be due to the appointment of conciliators by Government under the provisions of the Deccan Agriculturists' Relief Act, and the raising of the highest stamp duty for awards from 2s. to 10s. (Rs. 1-5). The conciliators who dispose of all agricultural suits are most of them members of the arbitration court and sit for work in the arbitration rooms.

REGISTRATION.

In Poona, besides the ordinary registration, there is a special branch of registration called village registration, which works under the Deccan Agriculturists' Relief Act. The work of ordinary registration employs eleven sub-registrars all of them special or full-time officers. One of these sub-registrars is stationed at each of the sub-divisional and pettydivisional head-quarters. In addition to supervision by the Collector as District Registrar, a special scrutiny under the control of the Inspector General of Registration and Stamps is carried on by the Divisional Inspector. According to the registration report for 1882-83 the gross registration receipts for that year amounted to £913 (Rs. 9130) and the charges to £743 (Rs. 7430). Of 2850, the total number of registrations, 2568 related to immovable property, 208 to movable property, and seventy-four were wills. Of 2568 documents relating to immovable property, 868 were mortgage deeds, 1285 deeds of sale, thirtythree deeds of gift, 197 leases, and 185 miscellaneous deeds. Including £120,784 (Rs. 12,07,840) the value of immovable property transferred, the total value of property affected by registration amounted to £127,725 (Rs. 12,77,250). Village registration under the Deccan Agriculturists' Relief Act employs forty-eight village registrars, all of whom are special or full-time officers. Besides the forty-eight village registrars, every, subregistrar is also a village registrar within the limits of his charge, and is responsible for the issue of registration books to village registrars and for the monthly accounts of the village offices. Under the Deccan Agriculturists' Relief Act a special officer for the district called Inspector of Village Registry Offices is appointed to examine the village registry offices. In addition to supervision by the Collector as District Registrar, a special scrutiny under the control of the Inspector General of Registration and Stamps is carried on by the Divisional Inspector. According to the registration report for 1882-83 the gross registration receipts, under the Deccan Agriculturists' Relief Act, for that year amounted to £1182 (Rs. 11,820) and the charges to £1571 (Rs. 15,710) thus showing a deficit of £389 (Rs. 3890). Of 40,247, the total number of registrations, 24,640 related to immovable property and 15,607 to movable property. Of 24,640 documents relating to immovable property 7382 were mortgage deeds, 2141 deeds of sale, fifty-four deeds of gift, 14,273 leases, and 790 miscellaneous deeds. Including £186,068 (Rs. 18,60,680) the value of immovable property transferred, the total value of property affected by registration amounted to £268,209 (Rs. 26,82,090). The introduction of village registration into the district has prejudicially affected the operations of ordinary registrations.

CRIMINAL JUSTICE.

At present (1883) thirty-one officers share the administration of criminal justice. Of these one is the District Magistrate, ten are magistrates of the first class, seven of the second class, and thirteen of the third class. Two of the first class and three of the third class are honorary magistrates. Of the first class two are covenanted civil servants, one uncovenanted civil servant also called a deputy collector, one commissioned military officer, and four mamlatdars. The District Magistrate has a general supervision over the whole district. In 1882 he, decided five appeal cases. In the same year the first class magistrates decided 2386 original cases in all. The two covenanted European civilians have the powers of a sub-divisional magistrate and also that of hearing appeals. In 1882 they decided eighty-two appeal cases. They divide the district between them according to their revenue charge which gives them each an average of 2674 square miles with a population of about 450,310 souls. The deputy collector has magisterial charge of the city of Poona. The two honorary first class magistrates help the city magistrate in his work. The commissioned military officer has magisterial charge of the Poona and Kirkee cantonments. The remaining four of the first class magistrates are mamlatdars and they have each a sub-division in their charge. Of the twenty second and third class magistrates, one is a European convenanted civil servant placed under the sub-divisional magistrate and nineteen are natives of India. Of this number eight are head karkuns who assist the mamlatdars and have no separate charge, and three are honorary magistrates who help the city magistrate. The remaining eight are sub-divisional and petty-divisional magistrates. These with the four first class magistrates have an average charge of 445 square miles with a population of about 75.052 souls. In 1882 the second and third class magistrates decided in all 3135 cases. Besides their magisterial duties these officers exercise revenue powers as mamlatdars, mahalkaris, and head karkuns to mamlatdars.

There are 1202 hereditary police patils who are entrusted with petty magisterial powers under section 14 of the Bombay Village Police Act (VIII of 1867) and eleven hold commissions under section 15 of the same Act.

POLICE, 1882.

In 1882 the strength of the district or regular police was 1096. Of these under the District Superintendent two were subordinate officers, 177 were inferior subordinate officers, and twenty-five were mounted and 891 foot constables. The cost of maintaining this force was for the Superintendent a yearly salary of £920 (Rs. 9200); for the subordinate officers en yearly salaries of not less than £120 (Rs. 1200) and the inferior subordinate officers on yearly salaries of less than £120 (Rs. 1200), a yearly cost of £4686 (Rs. 46,860); and for the foot and mounted constables a cost of £10,171 (Rs. 1,01,710). Besides their pay a sum of £240 (Rs. 2400) was yearly allowed for the horse and travelling allowances of the Superintendent; £696 (Rs. 6960) for the pay and travelling allowances of his establishment.; £223 (Rs. 2230) for the horse and travelling allowances of subordinate officers; and £2025 (Rs. 20,250) a year for contingencies and petty charges. Thus the total yearly cost of maintaining the police force amounted to £18,962 (Rs. 1,89,620). On an area of 5348 square miles, and a population of 900,621, these figures give one constable for every 4.88 square miles and 821 people and a cost of £3 10s. 11d. (Rs.35 as. 71/3) to the square mile or 51/2d. (32/3 as.) to each head of the

population. Of the total strength of 1096, exclusive of the Superintendent, ninety-one, twelve officers and seventy-nine men, were in 1882 employed as guards over treasuries and lock-ups or as escorts to prisoners and treasure, 239 were posted in towns and municipalities, 153 in catonments, and 612,103 officers and 509 men, on other duties. Of the whole number, exclusive of the Superintendent, 509 were provided with fire-arms and 586 were provided with batons; and 219 of whomeighty-seven were officers and 132 men could read and write. Except the District Superintendent who was a European and ten officers and three men who were Eurasians, the members of the police force were all natives of India. Of these fifty-one officers and 198 men were Muhammadans, fourteen officers and thirty men Brahmans, thirteen officers and sixty-six men Rajputs, eighty-two officers and 551 men Marathas, two officers and forty-eight men Ramoshis, six officers and twenty men Hindus of other castes, and one officer was a Jew. The European Superintendent and the ten Eurasian officers and three men were Christians.

OFFENCES, 1874-1882.

The returns for the nine years ending 1882 show a total of 137 murders, fifty-one culpable homicides, 185 cases of grievous hurt, 556 gang robberies, and 62,009 other offences. During these nine years the total number of offences gave a yearly average of 6993 or one offence for every fourteen of the population. The number of murders varied from twenty-one in 1882 to twelve in 1875 and 1878 and averaged fifteen; culpable homicides varied from eight in 1881 and 1882 to two in 1875 and averaged six; cases of grievous hurt varied from thirty-one in 1875 to sixteen in 1882 and averaged twenty; gang and other robberies varied from 125 in 1879 to thirty-seven in 1880 and averaged sixty-two; and other offences varied from 8366 in 1878 to 5344 in 1874 and averaged 6890 or 98.5 per cent on the whole. Of the whole number of persons arrested convictions varied from sixty-six per cent in 1878 to twenty-five per cent in 1874 and averaged forty-five per cent. The percentage of stolen property recovered varied from fifty-nine in 1874 to twenty-four in 1879 and averaged forty-one per cent. The details are:

Poona Crime and Police, 1874-1882.

| | OFFENCES AND CONVICTIONS. | | | | | | | | | | | |
|-------|---------------------------|------------|--------------|-------------|--------------------|----------|--------------|-------------|--|--|--|--|
| YEAR. | Mu | rder and A | ttempt to Mu | rder. | Culpable Homicide. | | | | | | | |
| | Cases. | Arrests. | Convictions. | Percentage. | Cases. | Arrests. | Convictions. | Percentage. | | | | |
| 1874 | 13 | 27 | 13 | 48 | 5 | 14 | 3 | 21 | | | | |
| 1875 | 12 | 33 | 12 | 36 | 2 | 7 | 3 | 43 | | | | |
| 1876 | 13 | 28 | 3 | 11 | 7 | 12 | 6 | 50 | | | | |
| 1877 | 16 | 35 | 14 | 40 | 4 | 2 | 2 | 100 | | | | |
| 1878 | 12 | 29 | 11 | 38 | 6 | 8 | 4 | 50 | | | | |

| 1879 | 20 | 22 | 6 | 27 | 7 | 24 | 4 | 17 |
|-------|-----|-----|----|----|----|-----|----|----|
| 1880 | 16 | 26 | 5 | 19 | 4 | 4 | 2 | 50 |
| 1881 | 14 | 24 | 8 | 33 | 8 | 9 | 1 | 11 |
| 1882 | 21 | 18 | 10 | 55 | 8 | 25 | | |
| Total | 137 | 242 | 82 | 34 | 51 | 105 | 25 | 24 |

continued--

| | | OFFENCES AND CONVICTIONS. | | | | | | | |
|-------|----------------|---------------------------|--------------|-------------|--|--|--|--|--|
| YEAR. | Grievous Hurt. | | | | | | | | |
| | Cases. | Arrests. | Convictions. | Percentage. | | | | | |
| 1874 | 24 | 37 | 17 | 46 | | | | | |
| 1875 | 31 | 102 | 27 | 26 | | | | | |
| 1876 | 21 | 45 | 19 | 42 | | | | | |
| 1877 | 17 | 18 | 17 | 94 | | | | | |
| 1878 | 17 | 16 | 13 | 81 | | | | | |
| 1879 | 18 | 27 | 15 | 55 | | | | | |
| 1880 | 20 | 23 | 19 | 83 | | | | | |
| 1881 | 21 | 36 | 6 | 17 | | | | | |
| 1882 | 16 | 24 | 12 | 50 | | | | | |
| Total | 185 | 328 | 145 | 44 | | | | | |

| | | OFFENCES AND CONVICTIONS—CONTINUED. | | | | | | | | | | |
|------|--------|-------------------------------------|--------------|-------------|-----------------|----------|--------------|-------------|--|--|--|--|
| YEAR | | Dacoitie | es and Robbe | ries. | Other Offenses. | | | | | | | |
| | Cases. | Arrests. | Convictions. | Percentage. | Cases. | Arrests. | Convictions. | Percentage. | | | | |
| 1874 | 84 | 233 | 81 | 35 | 5344 | 9861 | 2476 | 25 | | | | |
| 1875 | 41 | 124 | 29 | 23 | 5387 | 8790 | 3097 | 35 | | | | |
| 1876 | 56 | 240 | 66 | 28 | 5915 | 8289 | 2652 | 32 | | | | |
| 1877 | 71 | 191 | 69 | 36 | 7431 | 9888 | 5348 | 54 | | | | |

| 1878 | 39 | 101 | 44 | 43 | 8366 | 9870 | 6574 | 66 |
|-------|-----|------|-----|----|--------|--------|--------|----|
| 1879 | 125 | 444 | 196 | 44 | 7426 | 9917 | 5522 | 55 |
| 1880 | 37 | 97 | 67 | 69 | 8089 | 9473 | 4878 | 51 |
| 1881 | 56 | 83 | 15 | 18 | 6934 | 8841 | 3472 | 39 |
| 1882 | 47 | 79 | 11 | 14 | 7117 | 8452 | 3896 | 46 |
| Total | 556 | 1592 | 578 | 36 | 62,009 | 83,381 | 37,915 | 45 |

| | , | OFFEN | NCES AND C | CONVICTIC | NS—CO | NTINUED. | | |
|-------|--------|----------|--------------|-------------|-----------|------------|-------------|--|
| YEAR. | | 7 | Γotal. | | Property. | | | |
| | Cases. | Arrests. | Convictions. | Percentage. | Stolen. | Recovered. | Percentage. | |
| | | | | | £ | £ | | |
| 1874 | 5470 | 10,172 | 2590 | 25 | 11,682 | 6862 | 59 | |
| 1875 | 5473 | 9056 | 2168 | 35 | 9264 | 5382 | 58 | |
| 1876 | 6012 | 8614 | 2746 | 32 | 8273 | 2585 | 31 | |
| 1877 | 7539 | 10,134 | 5450 | 54 | 12,930 | 3799 | 29 | |
| 1878 | 8440 | 10,024 | 6646 | 66 | 12,795 | 5975 | 47 | |
| 1879 | 7596 | 10,434 | 5743 | 55 | 16,458 | 4015 | 24 | |
| 1880 | 8166 | 9623 | 4971 | 52 | 6734 | 2945 | 44 | |
| 1881 | 7033 | 8993 | 3502 | 39 | 7445 | 3776 | 51 | |
| 1882 | 7209 | 8598 | 3929 | 46 | 8008 | 3281 | 41 | |
| Total | 62,938 | 85,648 | 38,745 | 45 | 93,589 | 38,620 | 41 | |

VILLAGE POLICE.

The village police consists of the headmen called police *patils* who are appointed for life or for a term of years, and the Mhars, Ramoshis, and in some parts Kolis, who act as watchmen. They are remunerated by grants of land and sometimes by cash allowances. The nomination and dismissal of the police *patil* rest with the Commissioner of the Division, but he is under the direct orders of the District Magistrate.

PREDATORY TRIBES.

Ramoshis.

The chief predatory tribes found in the district are the Kolis and the Ramoshis. An account of the Kolis and their risings is given in the Population and History chapters, A descriptive account of The Ramoshis will be found in the Population chapter. Captain Mackintosh has preserved the following details about their history. [See Journal Madras Literary Society, I. and II.] The first traces of the Ramoshis are to be found in Satara round Khatav, Mhasvad, Malavdi, the fort of Mahimangad, and the town of Phaltan. Prom a large number of Telugu words in their language it seems they first migrated from Telingan, probably from the east and south-east of the present town of Haidarabad. The Ramoshis in their primitive state led a roving unsettled life, avoiding the habitations of the more civilised orders of society and engaging in plunder. On the principle of setting a thief to catch a thief they have from earliest times been employed as watchmen and for this service they enjoy certain hereditary rights. It is not known when the Ramoshis first crossed the Nira. A number of families settled to the north of the Nira and about the Purandhar hills many years before Shivaji was born (1627), but it was during Shivaji's struggles with the Muhammadans that the Ramoshis flocked in numbers to his standard. It is said that the Ramoshis always favoured Shivaji's interests and on many occasions exerted themselves greatly in his service and caused great annoyance to the Muhammadans. They plundered the Muhammadans during the night, attacking the houses or tents of their principal leaders, and carried off much valuable property including horses and camels and sometimes elephants. [A letter without date addressed by a Satara Raja to Vardoji one of the ancestors of the late Umaji Naik, applauding the dexterity with which Vardoji had plundered the Muhammadan commandant at Shirval and his steady conduct subsequently and inviting him to the Raja's presence in order that Vardoji might be rewarded for having discharged his duty so gallantly, was preserved in the house till 1834] The old men among them relate a number of stories connected with the exploits of their forefathers when employed under Shivaji.

Shortly after the capture of Sinhgad, Shivaji, who was anxious to get possession of Purandhar, sent a detachment from Sinhgad accompanied by a party of Ramoshis to surprise the Muhammadan garrison and capture the fort. With much difficulty they scrambled unobserved up a steep part of the hill and a Ramoshi contrived to ascend the wall and attach to the top the rope ladders which they carried with them. But as the Ramoshis were ascending the wall the sentry in the vicinity descried them and cut the ropes, and the escalading party were all precipitated to the bottom, some being killed and the rest desperately wounded. [Among the wounded on this occasion was Malmipatti, Vardoji's brother, a very active and enterprising man. He crawled away from the spot and concealed himself under some bushes and at night creeped to a small neighbouring village where a friend of his took care of him and dressed his wounds. After two months, restored to health, he returned to Sinhgad, where he learnt the melancholy tidings of his wife having destroyed herself as a *sati* or chaste and virtuous wife under the supposition that her wounded husband was killed by the Muhammadans.]

In a second attempt on Purandhar Shivaji was successful and it was probably at this time that the Ramoshis were included in the list of hereditary servants and defenders of the fort. Neither Shivaji nor Sambhaji found time to reward the Ramoshis who had faithfully and ably served the Marathas, and it was left for Shahu Raja to bestow suitable rewards

on the descendants of those who had contributed to the establishment of his grandfather's kingdom. On the part of the Purandhar Ramoshis, Dhulia Bhandolkar an ancestor of the *naiks* of Sasvad, a shrewd and intelligent man, was deputed to Satara to wait *on* the Raja, who issued orders for the grant of a considerable area of land together with the *mokasa* of the village of Sakurdi. The *mokasa* and a portion of the land was till 1834 enjoyed by the Purandhar Ramoshis. [It is said that when the Ramoshi *naiks* laid the Raja's order before the Peshwa Balaji Vishvanath, he told the Ramoshis that the Raja must have committed some mistake, and a much smaller quantity of land, about five *chahurs* of 120 *bighas* each, was allotted to them.]

About 1730, the Ramoshis became extremely troublesome, assembling in large bodies and plundering in every direction. Communication between the chief towns was stopped and travelling became unsafe. Pilaji Jadhavrav was appointed sarnaik of the Ramoshis and received injunctions to act with the greatest vigour in restoring order and to inflict summary punishment on the Ramoshis. Pilaji executed a large number of them. It is said that he killed many of them with his own sword, and that his brother Sambhaji was presented with a sword and permitted to put five Ramoshis to death every day. When their numbers had been greatly thinned, the Ramoshis petitioned the *sarnaik* to pardon them, and engaged to abstain from evil doing for the future. They were shortly afterwards employed to put down some gangs of plunderers along the banks of the Bhima. The successful manner in which this task was performed attracted the notice of government, and five of the most respectable naiks with their followers were selected to act as watchmen in the town of Poona, where robberies were constantly taking place. The five naiks were Abaji of Gaidara near Ulti, Malli of Alandi, Bhairji of Malsiras, Janoji of Loni-Kalbhar, and Sakroji of Mudri. A yearly cash allowance was granted to them and they were set in charge of from ten to twenty villages near their own place of residence. As sarnaiks or head watchmen of these villages they received from each village a yearly allowance of grain, a sheep at the Dasara festival, and a pair of shoes. In the town of Poona the descendants of these five Naiks continued to perform the duties of watchmen till 1834, with the exception of the Malsiras *naik*, who committed various outrages in his villages and was beheaded in 1793 in the town of Poona with his relations. After settling in Purandhar and the neighbourhood of Poona the Ramoshis continued to move northward towards Junnar, and thenee into Akola, Parner, and Sangamner in Ahmadnagar, and Sinnar in Nasik. At the same time they spread over the district lying east of Purandhar between the Nira and the Bhima river. The hereditary Ramoshis of Purandhar resided in hamlets near the hill forts on the north side, while many of the hereditary Kalis and Mhars had houses on the hill within the fortifications. In 1764 a large body of *shibandis* were enrolled and a certain proportion of them were Ramoshis, who were looked upon as a degraded caste and incorrigible thieves. The pay of the *naiks* was fixed at £1 4s. (Rs. 12) a month and each of their followers received 12s. (Rs. 6). They were however according to a prevailing custom obliged to do twelve months' duty for ten months' pay, and even from this allowance so many deductions were made by the different authorities through whose hands the money passed, that a Ramoshi could scarcely calculate on getting 8s. (Rs. 4.) a month. At the time of the birth of Madhavrav Narayan Peshwa (1774) the chiefs of the Ramoshis as well as the Koli naik are said to have been distinguished by honours and rewards. The country was in a disturbed state at

this time and the Ramoshis perpetrated many outrages. A naik named Dadji Ramoshi of Jejuri, who latterly resided at Supa, became notorious as an active and daring plunderer. He had a number of followers some of whom were mounted. In the guise of a merchant he made incursions into the Haidarabad and Berar territories. The Supa people lived in great dread of him. To gain his goodwill Brahmans sometimes invited him to an entertainment.[A Brahman guest expressed his astonishment on hearing his host ask Dadji to come and Bit down in his veranda. Thereupon Dadji remarked that the Brahman seemed afraid of being defiled, but he ought not to forget that when the Ramoshis plundered a Brahman at night they searched every corner of the house and handled everything.] He was once taken prisoner and ordered to be executed for having stolen three of the Peshwa's horses, but some of the courtiers represented that it would be much better to retain a man of such activity and hardihood at His Highness' disposal and he was set at liberty. At last a courageous Brahman woman whom Dadji had outraged proceeded to the fort of Purandhar and represented her case to Gangabai the Peshwa's mother, declaring that the disgrace the Ramoshi had brought on her entailed shame on all the Brahman race, particularly on Her Highness, and that for her own part as her honour was lost she could live no longer; and it is asserted she tore her tongue out of her mouth and died. Gangabai took an oath that she would not touch food till Dadji Ramoshi was executed, and the ministers finding her inexorable swore solemnly that they would have Dadji put to death. A confidential messenger was sent to call Dadji to proceed at once to the Purandhar fort for the performance of some special service. He repaired to Purandhar with a number of his followers, and after having received some presents was told that a confidential communication would be made to him in the afternoon. When he returned for his instructions accompanied by a few friends he was seized. When questioned about his misdeeds Dadji replied that he had perpetrated 1110 robberies and that the largest booty he had secured was in a banker's house at Chambhargonda in Ahmadnagar where he had found from £10,000 to £20,000 (Rs.1-2 lakhs). He was immediately executed with a number of his followers. [The natives believe that Dadji possessed a charm which rendered him invulnerable and that the executioner found it impossible to make any impression on his neck with a sword. A saw was called for whereupon Dadji asked for a knife, made an incision in his left arm, and extracted a valuable gem which had been placed there by himself. He then told one of the executioners, all of whom were greatly alarmed, to strike and sever his head at one blow.]

The Ramoshis of Purandhar were in the habit of collecting part of the revenue of the forty villages that were assigned for defraying the expenses of the fort. Bajirav, on his restoration in 1803, sent orders to them to deliver up the place to his officers, but they declined, stating in reply that they retained possession of the hill by direction of their master Amritrav the Peshwa's brother. The design of the Ramoshis was to make the fort their stronghold and render themselves independent of the Peshwa. Bajirav employed troops against them for about seven months but without success. Many skirmishes took place and a few men were killed and wounded on both sides. All attempts to subdue the Ramoshis by force having failed, the British Resident asked Amritrav for an order to the garrison to surrender the place. The rebel *naiks* obeyed Amritrav's order and evacuated the fort. They were directed to quit the district and their privileges were forfeited. Before the Ramoshis descended from the fort Raghoji Khomne, a nephew of Dadji Naik

proceeded to the shrine of the god Kedari in the fort and taking off his turban cast it aside and vowed in the presence of the image that he would never wear a turban again till he and his tribe were restored to the rights and privileges of which they were now deprived. He then went eastward accompanied by his son and his cousin Umaji with several of the Purandhar Ramoshis. For several years the Ramoshis perpetrated many outrages both in the Satara territory and in the country east of Poona along the banks of the Bhima river. The Ramoshi *naiks* of Jejuri had also become very formidable, plundering the surrounding villages and rendering the roads unsafe for travellers. In 1806 Bapu Gokhale, after reducing the Satara Ramoshis, resolved to chastise those of Jejuri and surrounded with his troops the small villages occupied by them. Several of the Ramoshis were killed and wounded in the skirmish that took place, and a party of them that escaped to the hill on which the temple stands were subsequently captured. Two of the *naiks* were blown away from guns and twenty-six other Ramoshis were beheaded. After Raghoji's death in 1815, Umaji returned to Purandhar, and in imitation of Raghoji threw away his turban and determined to fulfil his cousin's vow. The *naiks* presented several petitions to the Peshwa's government at Poona imploring that their forfeited lands and rights might be restored to them, but the petitions were unheeded by Bajirav. In January 1818 the Ramoshis again presented a petition to the flying Peshwa, tendering their services to him and praying for a restoration of their rights. Bajirav directed Gokhale to issue orders to the mamlatdars of Purandhar to assemble the Ramoshis and Kolis and to restore to them all the freehold lands and rights which had been sequestered on their expulsion from the fort of Purandhar in 1803. He also ordered that a certain number of both classes should be immediately employed to guard the approaches to the fort. But the Ramoshis continued their depredations and many thefts were committed in the houses of the European residents in Poona. Soon after it became a common custom to employ Ramoshis to watch houses daring the night on payment of about 14s. (Rs. 7) a month.

After the establishment of British rule Umaji, who had been allowed to build a house near Purandhar and treated with kindness, committed a robbery in Thana, and being apprehended was imprisoned for a year. During his confinement be learned to read, a most rare accomplishment amongst Ramoshis. Some time before this he had given up drinking, another proof of his remarkable character. On his release from prison, he commenced the. career of a bold and successful robber. He had many desperate encounters with parties of police sepoys, was wounded, pardoned, and admitted into the service of Government. Again he became a robber and was captured and finally executed in 1827. The singular adventures of this man, who, but for the English, might have become a second Shivaji, are worth perusal. [See Journal Madras Literary Society, I. and II.]

Kolis and Ramoshis.

In 1879, the predatory tribes again became troublesome. No less than fifty-nine dacoities were committed in the year by organised bands of dacoits. There were three principal gangs: the Satara Ramoshis led by two brothers Hari and Tatya Makaji and Rama Krishna of Kalambi; the Poona Ramoshis headed by Vasudev Balvant Phadke, a Brahman, and after his flight by Daulata Ramoshi; and the Poona Kolis headed by

Krishna Sabla and his son Maruti Sabla. The first gang committed thirteen dacoities in Poona. After committing several dacoities in Satara, Hari Makaji with a portion of the gang entered the Baramati petty division of Bhimthadi early in February 1879. On the 8th the dacoits were attacked by a party of police and two were captured, Hari himself escaping after severely wounding two policemen in a hand-to-hand encounter. In the beginning of March they reappeared in the south-east corner of the Indapur sub-division and committed several dacoities, but in the middle of March Hari was captured in Sholapur, and being found guilty of murder was executed at Jejuri. Tatya, his brother, committed several dacoities till the close of the year, but was soon after brought to justice along with the third leader Rama Krishna. The second gang organised by the Brahman Vasudev Balvant Phadke, which was apparently by far the most formidable, had a brief career of only three months, but during this time they committed no less than eighteen dacoities. Towards the end of February 1879 it was reported that the village of Dhamari in Sirur had been attacked by 200 or 300 dacoits. Major Daniell, Superintendent of the Poona Police, proceeded to the place and found that although the number of dacoits had been greatly exaggerated an organised system of dacoity had been set on foot and that some Brahmans had been seen among the dacoits, whose leader was a Brahman clerk in the Military Finance Office named Vasudev Balvant Phadke. The gang consisted of from forty to sixty men, chiefly Ramoshis. Villagers of good position were found to be implicated in Vasudev's movements and actions. The band moved about chiefly through the hills west of Poona, and committed dacoities at Dhamari, Valeh in Purandhar, Hami and Nandgari in Bhor, Sonapur in, Haveli, Chandkhed in Maval, and other places. After the last dacoity, which was perpetrated on the 31st of March, Vasudey, finding it impossible to realise the rebellious aspirations with which he had commenced his career as the leader of a band of plunderers, left the gang and wandered about the Nizam's dominions and part of the Madras Presidency as a pilgrim to various shrines. A reward of £300 (Rs. 3000) was offered by Government for his apprehension and he was captured on the 21st of April, tried before the Sessions Judge of Poona, and sentenced to transportation for life. From the diary found in his possession doubts have been raised as to his sanity. Daulata Ramoshi of Kedgaon in Haveli then assumed the leadership of the gang. A few dacoities of a trifling nature were committed during April, and matters appeared to be settling down, when the gang appeared in large numbers close to the village of Pabal in Sirur, and plundered one or two villages in the neighbourhood. Major Daniell proceeded to the spot accompanied by a detachment, of the Poona Horse and scoured the country unceasingly. The gang succeeded in escaping down the Kusur pass to the Konkan. They committed two dacoities at Nere and Palaspe in Thana on the night of the 16th of May, and returned again above the Sahyadris. On the 17th Major Daniell with a detachment of infantry and police managed to come up with the gang. Five dacoits were killed and eleven wounded and the greater portion of the property carried off in the Palaspe dacoity was recovered Daulata was killed in the action, and the gang utterly dispersed The arrangements made by Major Daniell were excellent and received the commendation of Government. The third band which was composed of the Koli families of the Purandhar Ghera headed by Krishna Sabla and his son committed twenty-eight dacoities in the district in the course of about seven months. The Kolis believed themselves to have been unjustly deprived of a large portion of their culturable land and their rising was instigated by Vasudev Phadke who had been under their protection for

some days in March. Krishna Sabla their leader was an old man who was formerly a police *havaldar*. During June the gang passed into Bhor and the Konkan. A detachment was placed at Sasvad in Purandhar under the command of Major Wise. During the monsoon the Koli band remained quiet but at the close further dacoities were committed, while another small band of from twelve to twenty men under Tatya Makaji also began to give trouble and plunder the villages on the Purandhar and Sinhgad ranges. On the 17th of October an informer in the employ of Major Wise, who had been a member of Tatya's gang, was murdered by Tatya and some of his followers. Towards the close of the year the operations conducted in Purandhar under Major Wise resulted in the total dispersal of the Koli gang and the arrest of the majority of the dacoits including Krishna Sabla the leader and his son.

JAILS.

Poona.

Besides the lock-up at each mamlatdar's office there is a district jail at Poona and a central jail at Yeravda. The number of convicts in the Poona jail on the 31st of December 1882 was 262 of whom 220 were males and forty-two females. During the year 1883, 622 convicts of whom 543 were males and seventy-nine females were admitted, and 683 of whom 575 were males and 108 females were discharged. Daring the year the daily average of prisoners was 221 and at the close of the year the number of convicts was 222 of whom 201 were males and twenty-one females. Of 622 the total number of convicts, 466 males and seventy-six females were sentenced for not more than one year; forty-one males and one female were for over one year and not more than two years; twenty-one males and one female were for more than two years and not more than five years; eight males were for more than five years and not more than ten years; and two males were sentenced to death. There were six convicts including one female under sentence of transportation. The daily average number of sick was 7.8. During the year one prisoner died in hospital. The total cost of diet was £403 (Rs. 4030) or an average of about £1 16s. (Rs. 18) to each prisoner.

Yeravda.

The number of convicts in the central jail at Yeravda on the 31st of December 1882 was 1140 males. During the year 1883 four male convicts were admitted and 447 males were discharged. During the year the daily average of prisoners was 1016 and at the close of the year the number of male convicts was 911. Of these 911 convicts, twelve were sentenced for not more than one year; thirty-six were for over one year and not more than two years; 158 were for more than two years and not more than five years; 201 were for more than five years and not more than ten years; and sixty-three were for more than ten years. Of 441 prisoners under sentence of transportation 154 were for life and 287 for a term. The daily average number of sick was 34.6. During the year thirteen prisoners died in hospital. The total cost of diet was £2057 6s. (Rs. 20,573) or an average of £2 6d. (Rs. 2014) to each prisoner.

FINANCE

BALANCE SHEETS.

1870-71 and 1882-83.

THE earliest balance-sheet of the district as at present constituted is for 1870-71. Exclusive of £31,884 (Rs. 3,18,840), the adjustment on account of alienated lands, the total transactions entered in the district balance-sheet for 1882-83 amounted under receipts to £858,866 (Rs. 85,88,660) against £875,725 (Rs. 87,57,250) in 1870-71 and under charges to £900,969 (Rs. 90,09,690) against £970,212 (Rs. 97,02,120). Leaving aside departmental miscellaneous receipts and payments in return for services rendered such as post and telegraph receipts, the revenue for 1882-83 under all heads, Imperial, fecal, provincial, and municipal, came to £243,633 (Rs. 24,36,330),[The total includes the following items: £156,793 land revenue, excise, assessed taxes, and forests; £26,822 stamps, justice, and registration; £3980 education and police; £56,038 local and municipal funds; total £243,633.] or, on a population of 900,621, an individual share of 5s. 478d. (Rs. 2 as.114). During the last thirteen years the following changes have taken place under the chief heads of receipts and charges.

Land.

Land revenue receipts, which form 44.78 per cent of the entire revenue of the district, have risen from £112,207 (Rs. 11,22,070) in 1870-71 to £126,339 (Rs. 12,63,390) in 1882-83, from which £114,590 (Rs. 1,45,900) were remitted by order of the Secretary of State. Charges fell from £53,080 (Rs. 5,30,800) in 1870-71 to £47,302 (Rs. 4,73,020) in 1882-83.

Excise.

The excise revenue of the Poona district amounted in 1882-83 to £31,166 (Rs. 3,11,660) against £16,579 (Rs. 1,65,790), the average annual realizations previous to 1876-77. The main source of excise revenue is the consumption of spirituous liquor manufactured from *moha* flowers and unrefined sugar. Liquor for the supply of the whole district is manufactured by the farmer in the Government distillery at Mundhva, built in 1873-74 by the then liquor farmer at an estimated cost of £3399 (Rs. 33,990) and made over to Government on the termination of his farm in 1877, free of cost in accordance with the terms of his agreement. *Moha* liquor is also imported from Gujarat and the Central Provinces. Liquor is issued from the distillery to the shops on payment of duty at the rate of 5s. (Rs. 2½) a gallon of strength 25 degrees under proof and 3s. 4½d. (Re. 1 as. 10¾) a gallon of strength 50 degrees under proof, a *sher* charge of 6d. (4 as.) and 4½d. (2¾ as.) being made on liquor of respective strengths intended for sale at shops in the city and cantonment of Poona. liquor is sold at shops at prices not exceeding 9s. (Rs. 4½) a gallon of strength 25 degrees under proof and 6s. 6d. (Rs. 3¼) a gallon of strength 50 degrees

under proof. In former years liquor farms used to be given out for lump sums without any stipulation as to the strength of the liquor to be retailed or as to selling prices or duty. The first farm given in the still-head duty system was for the year 1877-78. Since then the farms have been sold for periods of three years. The second triennial farm expired in July 1884. Government then substituted liquor of strength 60 degrees under proof for 50 degrees under proof and raised the duty on liquor of strength 25 degrees under proof to 6s. (Rs. 3) a gallon, leaving the highest selling price at 9s. (Rs. $4\frac{1}{2}$) a gallon as before. The duty on liquor of strength 60 degrees under proof is 3s. 1½d. (Rs. 1 9/16) and its selling price 5s. (Rs. 2½) a gallon. In 1882-83, of seventy-eight shops in the district fifty-eight were situated in the city and cantonment of Poona. A larger number of shops existed in previous years. In 1882-83, 103,323 gallons of strength 25 degrees under proof and 1184 gallons of strength 50 degrees under proof were manufactured; and issued from the distillery. Consumption has now increased to a little over one-tenth of a gallon on every head of the population, the increase resulting chiefly from the effectual suppression of smuggling and illicit distillation by the employment of a strong preventive establishment and the acquisition of the abkari management of adjoining native states.

The central distillery at Mundhva is in charge of a European offices on a salary of £10 (Rs. 100) and is guarded at all times by a police party of five constables. One inspector on £15 (Rs. 150) and one sub-inspector on £2½ (Rs. 25), two sub-inspectors on £2 (Rs. 20) each and twenty-six constables are also employed for the examination of liquor shops and for preventive duties. In 1882-83 the expenditure amounted to £549 16s. (Rs. 5498) against £123 14s. (Rs. 1237) in 1877-78.

There are about 30,000 toddy-producing trees in the district, a which not more than 4000 are tapped annually. In former year the privilege of drawing and selling toddy was sold annually for lump sums averaging £1900 (Rs. 19,000). Subsequently it was sold with the spirit farm; in 1878-79 and 1879-80, toddy farms were again sold separately from the spirit farm and they realis £1090 16s. (Rs. 10,908) and £1104 10s. (Rs. 11,045) respectively. From August 1880 a tree-tax of 3s. (Rs. 1½) for cocoanut and bra trees and 1s. (8 as.) for date and other kinds of palm trees has been imposed on each tree tapped. The farmer also pays in addition the tree-tax, a certain sum bid by him at the auction sale for m monopoly of drawing and selling toddy. The receipts for 1882-83 amounted to £1520 (Rs. 15,200). Forty-two shops are licensed for the sale of toddy, the number varying in different years. Till 1880-81 the number of shops licensed for the sale of Europe lien ranged between sixty-three and sixty-eight. The number increased to eighty-four in 1881-82 and again fell to sixty-five in the next year. Fees varying from £1 to £5 (Rs.10-50) are charged for the licenses. In 1882-83 the receipts amounted to £264 16s. (Rs.2648 almost equal to what they have been during the last ten years.

The privilege of retailing intoxicating drugs is sold annually farm. The receipts have increased from £695 16s. (Rs. 6958), the average of five years ending 1876-77 to £753 (Rs.7530) in 1882-83. The drugs ordinarily retailed are *bhang*, *ganja*, *majum*, *yakuti*, *shrikhand*, and *bhoj*. *Ganja* is the flower of the hemp plant, and *bhang* the dried leaves of the same plant. *Ganja* is used only in smoking mixed with tobacco; *bhang* pounded with spices and sugar and diluted in milk or water forms a palatable drink. *Majum*, *yakuti*, and

shrikhand are different compositions of spices mixed with bhang boiled in clarified butter. Bhoj is an intoxicating liquid prepared by boiling old jvari, gulvel, bhang, and kuchala in water. The hemp plant grows to a small extent in the Poona district, the greater portion of the supply of bhang and ganja being imported from Ahmadnagar, Sholapur, and Khandesh. Forty shops are licensed for the sale of intoxicating drugs. The number has been the same for many years past. The aggregate annual consumption is estimated at about 32 tons (880 mans of 40 shers of 80 tolas each).

The miscellaneous abkari revenue consists chiefly of the contribution made by the liquor farmer towards the cost of Government establishments at the rate of £40 (Rs. 400) a year, and of fines and confiscations. The receipts amount to about £540 (Rs. 5400).

Justice.

Justice receipts have risen from £2580 (Rs. 25,800) in 1870-71 to £6594 (Rs. 65,940) in 1882-83, and charges from £22,950 (Rs. 2,29,500) to £30,934 (Rs 3,09,340). The rise in receipts is Chiefly due to jail manufacture receipts, and in charges to an increase in the salaries of officers and staff and to the cost of materials for the Yeravda central jail.

Forest.

Forest receipts have risen from £7634 (Rs. 76,340) in 1870-71 to £8935 (Rs. 89,350) in 1882-83 and charges from £3745 (Rs. 37,450) to £8343 (Rs. 83,430). The increase in receipts is chiefly due to improved methods of working forests; the rise in charges is due to an increase in the salaries of officers and staff.

Assessed Taxes.

The following table shows the amount realized from the different assessed taxes levied between 1870-71 and 1882-83. Owing to the variety of rates and incidence it is difficult to make any satisfactory comparison of the results:

Poona Assessed Taxes, 1870-71-1882-83.

| YEAR. | Amount | YEAR. | Amount |
|-------------|--------|--------------|--------|
| Income Tax. | £. | License Tax. | £. |
| 1870-71 | 14,175 | 1878-79 | 10,393 |
| 1871-72 | 4745 | 1879-80 | 9623 |
| 1872-73 | 3176 | 1880-81 | 5189 |
| | | 1881-82 | 4811 |
| | | 1882-83 | 4943 |

Public Works.

Public Works receipts have risen from £11,425 (Rs.1,14,250) in 1870-71 to £23,704 (Rs. 2,37,040) in 1882-83, and charges have fallen from £231,796 (Rs. 23,17,960) to £142,318 (Rs. 14,23,180).

Military.

Military receipts have fallen from £54,739 (Rs. 5,47,390) in 1870-71 to£16,139 (Rs. 1,61,390) in 1882-83, and charges from £481,054 (Rs.1,48,10,540) to £413,637 (Rs. 41,36,370). The charges are chiefly pensions to retired soldiers and salaries of regimental officers.

Post.

Port receipts have risen from £7961 (Rs. 79,610) in 1870-71 to £13,501 (Rs.1,35,010) in 1882-83, and charges from £5959 (Rs.59,590) to £45,716 (Rs. 4,57,160). The increase both in receipts and charges is chiefly due to the transfer of the money order business to the post department.

Telegraph receipts have risen from £2067 (Rs. 20,670) in 1870-71 to £6289 (Rs. 62,890) in 1882-83, and charges have fallen from £5369 (Rs. 53,690) to £3384 (Re. 33,840).

Registration.

In 1882-83 registration receipts amounted to £1428 (Rs. 14,280) and charges to £1713 (Rs. 17,130).

Education.

Education receipts have risen from £323 (Rs. 3230) in 1870-71 to £2928 (Rs. 29,280) in 1882-83, and charges have fallen from £23,213 (Rs. 2,32,130) to£22,271 (Rs. 2,22,710).

Police.

Police receipts have risen from £847 (Rs. 8470) in 1870-71 to £1052 (Rs. 10,520) in 1882-83, and charges from £20,337 (Rs. 2,03,370) to £21,282 (Rs. 2,12,820).

Medicine.

In 1882-83 medical receipts amounted to £232 (Rs. 2320), and charges to £9075 (Rs. 90,750).

Transfer.

Transfer receipts have risen from £602,666 (Rs. 60,26,660) in 1870-71 to £609,329 (Rs. 60,93,290) in 1882-83. The increased revenue is due to larger receipts on account of deposits and loans, and local funds Transfer charges have risen from £43,678 (Rs 4,36,780) to £47,755 (Rs. 4,77,550). The rise is due to dumb and shroff-marked coin and notes of other circles sent to the Mint Master and the Reserve Trail Bury and to the payment of interest on loans and to the repayment of deposits. The transfer items shown against deposits and loans on both sides of the balance sheet do not include savings' bank deposits and withdrawals.

In the following balance sheets the figures shown in black on both sides of the 1870-71 and 1882-83 accounts are book adjustments On the receipt side the item of £31,884 (Rs. 3,18,840) against £28,471 (Rs. 2,84,710) in 1870-71 represents the additional revenue the district would yield had none of its lands been alienated. On the debit side the items of £3169 (Rs. 31,690) against £2712 (Rs. 27,120) in 1870-71 under land revenue, and £3357 (Rs. 33,570) against £3052 (Rs. 30,520)in 1870-71 under police are the rentals of the land granted for village service to village headmen and watchmen. The item of £25,358 (Rs. 2,53,580) against £22,669 (Rs. 2,26,690) in 1870-71 under allowances represents the rentals of the lands granted to hereditary officers whose services have been dispensed with and of charitable land grants. The item of £38 (Rs. 380) in 1870-71 under miscellaneous represents the rental of lands granted for service to be district postal runners. Cash allowances to village and district officers who render service are treated as actual charges and debited to land revenue. The incorporated and excluded local fund receipts in 1882-83 amounted in the aggregate to £29,228 (Rs. 2,92,280) and charges to £9905 (Rs. 99,050). Both these amounts include receipts and charges of the Poona and Kirkee Cantonment Funds.

Poona Balance Sheets, 1870-71 and 1882-83,

| REC | EIPTS. | | CHARGES. | | | | | | | |
|---------------------------------|----------|----------|---|----------|----------|--|--|--|--|--|
| Head. | 1870-71. | 1882-83. | Head. | 1870-71. | 1882-83. | | | | | |
| | £. | £. | £. | £. | £. | | | | | |
| Land Revenue | 112,207 | 111,749 | Refund and Drawbacks. | 2133 | 664 | | | | | |
| | 28,471 | 31,884 | Land Revenue | 53,080 | 47,302 | | | | | |
| Stamps | 38,738 | 18,800 | | 2712 | 3169 | | | | | |
| Excise | 19,133 | 31,166 | Stamps | 1487 | 584 | | | | | |
| Justice including Jail receipts | 2580 | 6594 | Interest on Service Fund and other Accounts | 42 | 99 | | | | | |
| Forests | 7634 | 8935 | Excise | 130 | 608 | | | | | |
| Assessed Taxes | 14,175 | 4943 | Justice | 22,950 | 30,934 | | | | | |

| Miscellaneous | 1140 | 191 | Forests | 3745 | 8343 | |
|-----------------------|---------|---------|--|---------|-------------------|--|
| Interest | 84 | 778 | Assessed Taxes | 273 | 134 | |
| Public Works | 11,425 | 23,704 | Allowances | 22,203 | 18,182 | |
| Military | 54,739 | 16,139 | | 22,669 | 25,358 | |
| Mint | | | Pensions | 8321 | 14,775 | |
| Post | 7961 | 13,501 | Ecclesiastical | 4684 | 4673 | |
| Telegraph | 2067 | 6289 | Miscellaneous | 1988 | 388 | |
| Registration | | 1428 | | 38 | | |
| Education | 323 | 2928 | Customs | | 63 | |
| Police | 847 | 1052 | Salt | | 413 | |
| Medicine | | 232 | Public Works | 231,796 | 142,318 | |
| Printing | 6 | 18 | State Railways | | 25,693 | |
| Minor Departments | | 563 | Military | 481,054 | 413,637 46,716 | |
| Superannuation | | 495 | Post | 5959 | | |
| Other Public Works | | 32 | Telegraph | 5369 | 3384 | |
| | | | Registration | 1509 | 1713 | |
| | | | Education | 23,213 | 22,271 | |
| | | | Police | 20,337 | 21,282 | |
| | | | | 3052 | 3357 | |
| | | | Medicine | 10,372 | 9075 | |
| | | | Jails | 13,102 | 13,729 | |
| | | | Printing | 842 | 110 | |
| | | | Administration | 10,642 | 18,290 | |
| | | | Public Works, Civil | 100 | 171 | |
| | | | Political Agencies | 1164 | 658 | |
| | | | Minor Departments | 39 | 5405 | |
| | | | Contribution from Provincial to Local Funds. | | 2600 | |
| Total | 273,059 | 249,537 | Total | 926,534 | 853,214 | |

| Transfer Items. | | | Transfer Items. | | |
|-----------------------|---------|---------|--------------------|---------|---------|
| Deposits and Loans | 18,011 | 27,006 | Deposits and Loans | 23,071 | 25,342 |
| Cash Remittances | 558,096 | 553,095 | Cash Remittances | 70 | 5096 |
| Local Funds | 26,559 | 29,228 | Interest | 5255 | 7512 |
| | | | Local Funds | 15,282 | 9905 |
| Total | 602,666 | 609,329 | Total | 43,678 | 47,755 |
| Grand Total | 875,725 | 858,866 | Grand Total | 970,212 | 900,969 |
| | 28,471 | 31,884 | | 28,471 | 31,884 |

REVENUE OTHER THAN IMPERIAL.

LOCAL FUNDS.

District local funds have been collected since 1863 to promote rural instruction and supply roads, water, drains, rest-houses, dispensaries, and other useful works. In 1882-83 the receipts amounted to £16,248 (Rs. 1,62,480) and the expenditure to £16,886 (Rs. 1,68,860), the excess outlay of £638 (Rs. 6380) being met from the previous year's balance. The special land cess, of which two-thirds are set apart as a road fund and the rest as a school fund, in 1882-83 yielded £8992 (Rs. 89,920). The subordinate funds, Which include a toll fund, a ferry fund, a cattle pound fund and a school fee fund, yielded £4235 (Rs. 42,350). Government, municipal, and private contributions amounted to £2687 (Rs. 26,870) and miscellaneous receipts to £334 (Rs. 3340). This revenue is administed by district and sub-divisional committees partly of official and partly by private members. The district committee consists of the Collector, an assistant or deputy collector, the executive engineer, and the educational inspector as official and the proprietor of an alienated village and six landholders as non-official members. The subdivisional committees consist of an assistant collector, the mamlatdar, a public works officer, and the deputy educational inspector as official and the proprietor of an alienated village and three landholders as non-official members. The sub-divisional committees bring their local requirements to the notice of the district committee who prepare the yearly budget.

For administrative purposes the local funds are divided into two main sections, one set apart for public works and the other for instruction. The 1882-83 receipts and disbursements under these two heads were:

Poona Local Funds, 1882-83.

PUBLIC WORKS.

| RECEIPTS. | | CHARGES. | | | | | |
|---|--------------|------------------------------------|--------|--|--|--|--|
| | £. | | £. | | | | |
| Balance on 1st April 1882 | 2338 | Establishment | 2015 | | | | |
| Two-thirds of Land Cess 5 | | New Works | 2311 | | | | |
| Tolls | 1938 | Repairs | 4503 | | | | |
| Ferries | 516 | Medical Charges | 533 | | | | |
| Cattle Pound | 588 | Miscellaneous | 1258 | | | | |
| Contributions | 798 | Balance on 31st March 1883 | 1867 | | | | |
| Miscellaneous | 314 | | | | | | |
| Total | 12,487 | Total | 12,487 | | | | |
| | INSTR | EUCTION. | | | | | |
| RECEIPTS. | | CHARGES. | | | | | |
| | £. | | £. | | | | |
| Balance on 1st April 1882 | 760 | School Charges | 5868 | | | | |
| One-third of Land Cess | 2005 | | | | | | |
| One-unity of Land Cess | 2997 | | | | | | |
| School Fee Fund | 1193 | School House Repairs | 395 | | | | |
| | | School House Repairs Miscellaneous | 395 | | | | |
| School Fee Fund | 1193 | - | | | | | |
| School Fee Fund Contributions, Government | 1193 1863 | Miscellaneous | 3 | | | | |

Since 1863 from local funds about 731 miles of road have been made and kept in order and planted with trees. To improve the water-supply 370 wells, three ponds, three riverside *ghats* or series of stone steps, two aqueducts, three dams, and two basins to catch spring water at the foot of hills have been made or repaired. To help village instruction about one hundred schools, and for the comfort of travellers ninety-two rest-houses have been built and repaired Besides these works sis dispensaries have been maintained by grants-in-aid, two new dispensaries are newly built, and 138 cattle-pounds have been built and repaired.

MUNICIPALITIES.

There are twelve municipalities in the district, one each at Alandi, Baramati, Indapur, Jejuri, Junnar, Khed, Lonavla, Poona, Sasvad Sirur, Talegaon Dabhade. and Talegaon

Dhamdhere. In 1882-83 the district municipal revenue amounted to £26,810 (Rs. 2,68,100) of which £14,100 (Rs. 1,41,000) were from octroi dues, £4138 (Rs. 41,380) from assessed taxes, £2584 (Rs. 25,840) from house tax, £841 (Rs. 3410) from wheel-tax, and £5647 (Rs. 56,470) from miscellaneous sources.

The following statement gives for each of the twelve municipalities the receipts, charges, and incidence of taxation during the year ending 31st March 1883:

Poona Municipal Details, 1882-83.

| | | | | RE | | | | | | |
|-----------------------|-------------------|-------------------|-------------|---------------|-------------------------------|-------------------------|---------------------|--------|---|-------------|
| NAME | DATE | PEOPLE (1881.) | Octroi. | House Tax. | Tolls and Wheel Tax. | Asse- ssed Taxes. | Miscell- aneous. | TOTAL. | | CID- NCE |
| | | | £. £. £. £. | | £. | s. | d. | | | |
| Poona | 1856 | 129,751 | 12,698 | 1853 | 330 | 4055 | 4368 | 23,304 | 3 | 7 |
| Lonavla | 1st April 1877 | 3334 | | 69 | | | 31 | 100 | 0 | 7 |
| Talegaon Dabhade | 1st June 1866 | 4256 | 224 | | | 8 | 13 | 245 | 1 | 2 |
| Sasvad | 4th Jany. 1879 | 5684 | 250 | | | | 22 | 272 | 0 | 9 |
| Jejuri | 28th Dec. 1868. | 3245 | 61 | | | | 242 | 303 | 1 | 10 |
| Baramati | 1st Jany 1865 | 5272 | 373 | | | | 211 | 584 | 2 | 2 |
| Indapur | 1st Jany 1865 | 4242 | 117 | 19 | 11 | | 43 | 190 | 0 | 10 |
| Sirur | 1st July 1868 | 4372 | 377 | 43 | | 75 | 145 | 640 | 2 | 11 |
| Talegaon Dhamdhere | 13th Dec. 1855 | 3620 | | 60 | | | 10 | 70 | 0 | 03/4 |
| Junnar | 1st May 1861 | 10,373 | | 472 | | | 40 | 512 | 0 | 11 |
| Khed | 6th June 1863 | 3836 | | 42 | | | 3 | 45 | 0 | 23/4 |

| Alandi | 21st Nov. 1867. | | 1754 | | | 2 | 6 | | | 5 | | 19 | 545 | | 6 | 5 |
|--------------------|--------------------|----|----------|----------|-------|---------|---------|-------|-----|----------|----|----------|------|--------|--------|----|
| | Total | 17 | 9,739 14 | | 1,100 | 00 2584 | | 341 | 413 | 38 | 56 | 547 26,8 | | 10 2 | | 11 |
| NAME. | | | | CHARGES. | | | | | | | | | | | | |
| | | | Staff. | f. Safet | | y. | Health. | | S | Schools. | | Works. | | Total. | | |
| | | | £ | | £ | | | £ | | £ | | | £ | | £ | |
| Poona | | | 2556 | | 1651 | | 12 | 2,526 | | 54 | 1 | 56 | 12 | 22,399 | | |
| Lonavla | | | 17 | | 1 | | | 48 | | | | 19 | | 85 | | 85 |
| Talegaon I | Dabhade | | 73 | 10 | |) | | 48 | | | | 8 | | 139 | | |
| Sasvad | | | 92 | 1 | | | | 104 | | 11 | | 46 | | 254 | | |
| Jejuri | Jejuri | | 57 | 2 | | 2 | 200 | | | | | 33 | | 292 | | |
| Baramati | Baramati | | 149 | | 32 | | 181 | | | 32 | | 72 | | 466 | | |
| Indapur | | | 53 | | 12 | | | 102 | | | | 23 | | 190 | | |
| Sirur | | | 90 | | 23 | | 290 | | | 29 | | 34 | | 466. | | |
| Talegaon Dhamdhere | | | 6 | | 1 | 1 | | 25 | | | | | | | 50 | |
| Junnar | | | 37 | 7 | | 7 | 124 | | | 24 | | 3 | | 195 | | 95 |
| Khed | | | 14 | 14 1 | | | | 29 | 9 | | - | 36 | | 80 | | 80 |
| Alandi | | | 67 | | 89 | | | 168 | | 11 | | 187 | | 522 | | 22 |
| Г | otal | | 3211 | | 1830 |) | 13,845 | | | 161 | | 60 | 6091 | | 25,138 | |



INSTRUCTION

SCHOOLS.

EDUCATION in Maratha times was carried on by means of indigenous schools, the only trace of public -education being the yearly distribution of charity called *dakshina* which used to cost about £50,000 (Rs. 5 *lakhs*) a year. The *dakshina* was originally started at Talegaon by Khanderav Dabhade Senapati, but when Trimbakrav Dabhade was in 1730 killed in a battle fought with the Peshwa Bajirav Ballal's troops, the Peshwa to conciliate the people transferred the institution to Poona. The original plan was to give prizes to learned Brahmans, but the institution degenerated in the time of the last Peshwa (1796-1817) into a mere giving, of alms, and handsome sums were given to all Brahman claimants. [In 1797 the ceremony of distributing the *dakshina* was witnessed by Captain Moor who (Hindu Pantheon, 378) has left the following account of the same: of the

annual ceremony of dakshina or alms-giving, great sums are given away at Parvati. It would not be worth the pains for the majority to come from considerable distances, but as a gift on this day tells tenfold of an ordinary alms, others as well as the Peshwa make presents to some Brahmans, as do generous people on the road to and from this meritorious pilgrimage. The whole month (Shravan) is indeed very fit for the benefit of hospitality and almsgiving, so that the travelling Brahmans are fed all the way to Poona and home. Some come from Surat, Pandharpur, and other more distant places, and it is confidently said that 40,000 have been known to assemble on this occasion at Parvati. It is customary, on a few preceding days, for the Peshwa and other great men to entertain Brahmans of eminence and to make them present, and these favoured and learned persons do not crowd with the mob to Parvati. The Peshwa gives some fifty, some hundred, and even so far as a thousand rupees according, it is said, to their virtue and knowledge; but it is not likely that any examination or scrutiny can take place or that the bounty can be bestowed otherwise than by favour and interest, tempered perhaps by the reputation or the appearance of the receiver. About Parvati are some enclosures. One square field has a high wall about it with four entrances through double gates. It is not usual for any but Brahmans to be admitted on the day of the dakshina, but I and Captain Gardener by the exercise of a little civility were let in but not our attendants as no Brahman was among them. At three of the four entrances Brahmans were admitted. At one gates where the operation of weighing and moving the money was going on, stood a cauldron of red liquid, from which a man dipping his hand in marked every candidate on some part of his garment or in default of garment on his skin with its expanded impression and admitted him. From six to ten in the night Brahmans were admitted in the field which was called ramana. No one was excluded. They were kept in the field until all were collected. The money was given at the time of quitth the field. It was from Rs. 3 to Rs. 10, caprice or pleasure being the chief guite One of the assembled Brahmans said he would get five, seven, or ten rupees and that it all was fortune or fate. The arrangement at the gates was this, the Peshwa was at one gate, and Chimnaji Apa his younger brother, Amritray, and Nana were at the other three gates. In ail about Rs. 5 laks were given.] In 1819 soon after the British took possession of Poona, according to Mr. Elphinstone, there were indigenous schools in all towns and in many villages, but reading was confined to Brahmans, Vanis, and such of the agricultural classes as had to do with accounts. Books were scarce, and. the common ones probably ill chosen. [Mr. Elphinstone thus wrote at the time about the opening of schools: I am not sure that our establishing free schools would alter this state of things, and it might create a suspicion of some concealed design on our part. It would be more practicable and more useful to give a direction to the reading of those who do learn, of which the press affords so easily the means. There exists in the Hindu languages many tales and fables that would be generally read, and that would circulate sound morals. There must be religious books tending more directly to the same end. If many of these were printed and distributed cheaply or gratuitously the effect would without doubt be great and beneficial. It would however be indispensable that they should be purely Hindu. We might silently omit all precepts of questionable morality, but the slightest infusion of religious neutrality would secure the failure of the design. It would be better to call the prejudices of the Hindus to our aid in reforming them and to control their vices by the ties of religion which are stronger than those of law. By maintaining and purifying their present tenets at the same time that we enlighten their

unders; anding, we shall bring them nearer to that standard of perfection at which all concur in desiring that they should arrive; while any attack on their faith, if successful, might be expected in theory as is found in practice, to shake their reverence for all religion and to set them free from those useful restraints which even a superstitions doctrine imposes on the possessors. Elphinstone's Report (1819), 53.]

The abolition of the *dakshina* would have been extremely unpopular, but the sum was too enormous to waste. Mr. Elphinstone therefore did away with all but the original distribution of prizes, which cost, in 1819, £5000 (Rs. 50,000). This expenditure was kept up, but most of the priaes instead of being conferred on proficients in Hindu divinity were recommended by Mr. Elphinstone to be allotted to those skilled in the more useful branches of learning, law, mathematics, and others, and to a certain number of professors kept to teach those sciences. [Elphinstone's Report (1819), 53.]

In 1821, a college for the encouragement of the study of Sanskrit and of ancient Hindu literature and science was opened at Poona. The college began with nearly a hundred students, and was main-tailted at an annual cost of £1525 (Rs. 15,250) including £120 (Rs. 1200) salary of the Principal at £10 (Rs. 100) a month, £750 (Rs. 7500) salary of eighteen Shastris and assistants at £62 10s. (Rs. 625) a month, £516 (Rs. 5160) stipends of eighty-six scholars at 10s. (Rs. 5) each a month, £108 (Rs. 1080) clerical and menial establishment and contingencies, £15 (Rs. 150) allowance for vyaspuja or teacherworship, £10(Rs.100) allowance for Ganpati, and £6 (Rs.60) allowance for the Divali festival. The college was however not at first successful, and in 1823 the Court of Directors suggested that it should be closed. In this Despatch the Court also vetoed the proposal of the Local Government to found an Arts College at Bombay.] But Mr. Elphinstone, then Governor of Bombay, was strongly opposed to its abolition. He maintained that the institution had been founded for the conciliation of a large and influential section of the people, and that, when once the college had become an established place of resort for Brahmans, it would be easy to introduce such gradual improvements in its organization as would make the institution a powerful instrument for the diffusion of knowledge and for the encouragement of the learning of the country. In deference to Mr. Elphinstone's unrivalled knowledge of the temper and capacity of the people of the Deccan, the Court of Directors did not press their objection to the continuance of the college.

In 1826, two vernacular schools were opened by Government, one each at Poona and Sasvad, and by 1847 their number rose to eighteen. Of the eighteen Government vernacular schools in the district in 1847 three were in Poona and one each at Junnar, Sasvad, Indapur, Talegaon, Supa, Khed, Gule, Chinchvad, Paud, Chas, Shivapur, Khede-Kadus, Avsari, Chakan, and Baramati.

In 1830, the East Indians of Bombay formed themselves into an association for the purpose of aiding respectable persons of their class in agricultural and other pursuits, and a grant was made to them of a palace built by the last Peshwa Bajirav at Phulgaon or Phulshahar on the banks of the Bhima with forty-two acres of land including a large and productive fruit garden. This place was recommended by its salubrity and by its vicinity

to Poona and to the great road from Bombay to Alimadnagar. The colony consisted of a head person who had the powers of a village magistrate, a schoolmaster, a schoolmistress, a doctor, and ten or twelve; apprentices. The colony made much progress within twelve months. The association, with the help of a donation from Government of about £30 (Rs. 300), put the palace into excellent order. There was a small library of useful works, with a turning machine and a lithographic press. The boys were well clothed and fed and their whole expense was not above 16.s. (Rs. 8) each a month. They rose at daylight and worked in the garden till half-past seven when they returned to breakfast, after which they attended school till dinner time and learnt reading, writing, and arithmetic. After dinner some of the best instructed aided at a lithographic press whilst others turned articles of furniture. Great attention was paid to religious and moral teaching. The establishment was placed under the Collector of the district. Some rooms of the palace were made the office of the deputy surveyor general whose draftsmen were East Indians. They settled at the place with their families. Maps and papers were copied and lithographed under the immediate superintendence of the deputy surveyor general. The children of the village which daily increased in inhabitants were benefited by the instruction which was given freely. Much of the rapid advance of the institution was owing to Mr. Sundt who was its head, and the aid he received from others particularly Mr. Webb, the principal draftsman of the deputy surveyor general's office. [Malcolm's Government of India Appendix A.66.]

Mr. Jacquemont who was in Poona in 1832 has left the following account of Poona schools: Mr. Elphinstone was keen to encourage education. In several of the chief cities he founded schools to teach English, drawing, geometry, and algebra. One of the best was under Mr. Jervis at Poona. There were 150 scholars from fifteen to twenty years of age. Some learnt English, others mathematics, carpentry, making plans, and surveying. They had supplied engineers. But the Government was the only employer. Their algebra and geometey was no help to the others in earning a livelihood. One of the best a Portuguese by birth was anxious to be Jacquemont's servant. Both masters and pupils were paid, the pupils 10s. (Rs. 5) a month. It was cruel to give poor children a high training, pay them to learn, and then to leave them without work. Government forced by humanity as well as economy was busy cutting down if not stopping the school. [Jacquemont's Voyages, III, 564.]

In 1834, the Poona Sanskrit College was remodelled, and from 1837 when Captain Candy was appointed its Superintendent, it began to make steady progress. Sir Robert Grant, the Governor of Bombay, took a warm interest in the college. At his instance the Board of Education established a medical class, and directed that the students should combine the study of European medical works with the study of the useful portion of their own Sanskrit treatises. A Brahman in Poona of great repute for his skill in surgical operations and for his knowledge of the Sanskrit treatises on medicines was appointed to the college staff. Sir Robert Grant also caused a vernacular department to be added to the college in 1837.

In 1842, there were 161 indigenous schools with an attendance of 3637 pupils in the district. Of these, twelve schools with an attendance of 199 pupils were in Bhimthadi,

fifty-nine schools with an attendance of 1549 pupils were in Haveli, fifteen schools with an attendance of 212 pupils were in Indapur, twelve schools with an attendance of 363 pupils were in Khed, six schools with an attendance Of ninety-five pupils were in Maval, fourteen schools with an attendance of 296 pupils were in Pabal, twenty-seven schools with 498 pupils were in Purandhar, and sixteen schools with 425 pupils were in Shivner. The establishment of Government schools had the effect of lessening the number of the indigenous schools in the district except in Haveli where there was a slight increase. In 1847 there were 147 indigenous schools with an attendance of 3115 pupils. Of these six were in Bhimthadi, seventy-five in Haveli, eight in Indapur, sixteen in Khed, nineteen in Pabal, four in Purandhar, eight in Maval, and eleven in Shivner. The System pursued in Government schools was superior to that pursued in indigenous schools. [Bom. Rev. Rec. 23 of 1849, 164 -165.]

In 1851-52, the separate English and Vernacular Normal schools already established at Poona were amalgamated with the Sanskrit and Vernacular College and thus was laid the foundation of the present Arts College in Poona which arose in 1857 and was affiliated with the Bombay University in 1860.

In 1854, at the suggestion of Lieutenant-Colonel Walter Scott, Bombay Engineers, a school was established in Poona for the purpose of educating subordinates of the Public Works Department. Out of it arose in 1865 the Engineering College or the College of Science as it was afterwards called in 1880. In 1855-56 there were ninety-five Government schools, ninety-four of them vernacular including one for girls, and one High school, with 4206 names on the rolls and an average attendance of 2831 pupils. In 1857, a vernacular college for training teachers for the use of the vernacular schools in the presidency was established at Poona. In 1865-66 there were ninety-six schools with 5478 names on the rolls and an average attendance of 4511 pupils. Eighty-three of these schools were vernacular, eleven anglo-vernacular, one a high school, and one a training college. In 1870 a vernacular college for training female teachers was established at Poona. In 1878 a medical school was opened in connection with the Sassoon Hospital through the generosity of Mr. Bairamji Jijibhai of Bombay. In 1882-83 there were 266 Government schools or on an average one school for every four inhabited villages, alienated as well as Government, with 17,794 names on the rolls. Of the 1882-83 schools ten were girls schools with 522 names on the rolls and an average attendance of 335. Lately a scheme to establish a High School in Poona for the use of native ladies has, through the benevolence of Sir William Wedderburn, Bart., District Judge of Poona, 'been brought to perfection and sanctioned by Government. The school was opened on the last Dasara holiday (29th September 1884) by Sir James Fergusson, Governor of Bombay, who has warmly supported the institution.

STAFF.

In 1882-83, under the Director of Public Instruction and the Educational Inspector Central Division, the education of the; district, exclusive of the Deccan and Science Colleges, *was* conducted by a local staff 484 strong. Of these one was a deputy educational inspector with general charge over all the schools of the district-except the

high school, drawing a yearly salary of £240 (Rs. 2400), one an assistant deputy educational inspector drawing a yearly salary. of £120 (Rs.1200), and the rest were masters and assistant masters with yearly salaries ranging from £3 12s. to £600 (Rs. 36 - 6000).

COST.

Excluding superintendence charges, the total expenditure on account of these 266 schools amounted to £10,897 16s. (Rs. 1,08,978) of which £4939 16s. (Rs. 49,398) were paid by Government and £5958 (Rs. 59,580) from local and other funds.

INSTRUCTION.

Of 266 the total number of Government schools, in 254 Marathi only was taught, in two Hindustani (Urdu) only, in six English and Marathi, in one Marathi and Sanskrit, in one Marathi and Hindustani (Urdu), in one English Gujarati and Hindustani, and one was a High School teaching English and three classical languages (Sanskrit Persian and Latin) up to the standard required to pass the University entrance test examination. Of the 254 Marathi schools 244 were for boys and 10 for girls.;

READERS AND WRITERS.1881.

The 1881 census returns give for the chief races of the district the following proportion of persons able to read and write: On 846,784 the total Hindu population 11,790 (males 11,594, females 191 or 1.39 per cent below fifteen and 3675 (males 3651, females 24) or 036 per cent above fifteen were under instruction; 977 (males 928, females 49) or 011 per cent below fifteen and 31,054 (males 30,800, females 254) or 3'66 per cent above fifteen were instructed; 320,993 (males 159,960, females 161,033) or 37-80 per cent below fifteen and 479,785 (males 221,054, females 258,731) or 56.65 per cent above fifteen were illiterate. Of 42,036 the total Musalman population, 1188 (males 1111, females 77) or 2.82 per cent below fifteen and 266 (males 262, females 4) or 0.63 per cent above fifteen were under instruction; 100 (males 90, females 10) or 023 per cent below fifteen and 2249 (males 2181, females 68) or 5.55 per cent above fifteen were instructed; 14,833 (males 7086, females 7747) or 35.28 per cent below fifteen and 23,400 (males 10,501, females 12,899) or 55.66 per cent above fifteen were illiterate. Of 9506 Christians, 1194 (males 618, females 576) or 1256 per cent below fifteen and 907 (males 836, females 71) or 9.54 per cent above fifteen were under instruction; 93 (males 47, females 46) or 097 per cent below fifteen and 3768 (males 2770, females 998) or 39.66 per cent above fifteen were instructed; and 1458 (males 692, females 766) or 15.28 per cent below fifteen and 2086 (males 1158, females 928) or 21.95 per cent above fifteen were illiterate:

Poona Education, 1881.

| AGE. | HINDUS. | MUSALMA'NS. | CHRISTIANS. |
|------|---------|-------------|-------------|
|------|---------|-------------|-------------|

| | Males. | Females. | Males. | Females. | Males. | Females. |
|-----------------------|-------------|-------------|------------|------------|----------|----------|
| Under Instruction. | | | | | | |
| Below Fifteen | 11,594 | 196 | 1111 | 77 | 618 | 576 |
| Above Fifteen | 3651 | 24 | 262 | 4 | 836 | 71 |
| Instructed. | | | | | | |
| Below Fifteen | 928 | 49 | 90 | 10 | 47 | 46 |
| Above Fifteen | 30,800 | 254 | 2181 | 68 | 277 0 | 998 |
| Illiterate. | | | | | | |
| Below Fifteen | 159,96 0 | 161,03 3 | 7086 | 7747 | 692 | 766 |
| Above Fifteen | 221,05 4 | 258,73 1 | 10,50 1 | 12,89 9 | 115 8 | 928 |
| Total | 426.49 7 | 420,28 7 | 21,23 1 | 20,80 | 612 1 | 337 5 |

PUPILS BY RACE.

1855-56 and 1882-83.

The following statement shows that of the two chief classes of the people the Hindus had the larger proportion of their boys and girls under instruction both in 1855-56 and 1882-83:

Pupil by Race, 1855-56 and 1882-83.

| | 185 | 55-56. | | 1882-83. | | | | | | |
|-----------|---------------------|--------|---------|-------------|--------------------------|-------------|--|--|--|--|
| RACE. | Pupils. Percentage. | | Pupils. | Percentage. | School-going Population. | Percentage. | | | | |
| Hindu | 402 4 | 95.67 | 15,361 | 98.48 | 217,732 | 7.05 | | | | |
| Musalmans | 182 | 4.33 | 1072 | 6.52 | 10,777 | 9.94 | | | | |
| Total | 420 6 | | 16,433 | | 228,509 | 7.19 | | | | |

SCHOOL RETURNS.

1855-1883.

The following tables prepared from special returns furnished by the Educational Department show in detail the number of schools and pupils with their cost to Government:

Poona School Returns, 1855-56, 1865-66, and 1882-83.

| | 50 | CHOOL | C | PUPILS. | | | | | | | | |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|
| CLASS. | 50 | CHOOI | LS . | | Hindus. | | Musalmans. | | | | | |
| | 1855- 56. | 1865- 66. | 1882- 83. | 1855- 56. | 1865- 66. | 1882- 83. | 1855- 56. | 1865- 66. | 1882- 83. | | | |
| Government. | | | | | | | | | | | | |
| High School | 1 | 1 | 2* | | 317 | 568 | | | 16 | | | |
| Anglo- vernacular | | 11 | 6 | | 1370 | 566 | | 38 | 55 | | | |
| Vernacular | 94 | 83 | 256 | 4024 | 3384 | 14,067 | 182 | 189 | 990 | | | |
| Training Schools | | 1 | 2 | | 54 | 160 | | | 11 | | | |
| Total | 95 | 96 | 266 | 4024 | 5125 | 15,361 | 182 | 227 | 1072 | | | |

^{*} One of these is a Drawing class attached to the High School.

| | | | PUPILS- | –CONTIN | IUED. | |] | VERA | ľ |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| CLASS. | | Parsis | • | | Total. | ATTENDANCE. | | | |
| | 1855- 56. | 1865- 66. | 1882- 83. | 1855- 56. | 1865- 66. | 1882- 83. | 1855- 56. | 1865- 66. | 1882- 83. |
| Government. | | | | | | | | | |
| High School | | 26 | 169 | | 843 | 753 | | | |
| Anglo- vernacular | | 10 0 | 842 | | 150 8 | 1463 | | | |

| Vernacular | | 348 | 420 6 | 357 3 | 15,40 5 | | |
|------------------|-------------|----------|----------|----------|------------|------|--|
| Training Schools | | 2 | | 54 | 173 | | |
| Total | 12 6 | 136 1 | 420 6 | 547 8 | 17,79 4 | | |

† Detailed figures are not available.

| | | | FEEG | | | | | | REG | CEI | PTS | • | |
|----------------------|---|---------------|---------------------------------------|------------|--------------|---------------|--------------|--------------|-----------|-------------|-------------|-------------|---------------|
| CLASS. | | | FEES | • | | | Gov | vernm | ent. | | Local Cess. | | |
| | | 355- 56. | 1865- 66. | | | 882- 83. | 1855- 56. | 1865- 66. | 188 83 | | 855- 56. | 1865 66. | -1882- 83. |
| Government. | | | | | | | £ | £ | £ | | £ | £ | £ |
| High School | | | 4s. | | 1 <i>s</i> t | to 10s. | | 1267 | 161 | .8 | | | |
| Anglo- vernacular | | | ³ / ₄ d. to 2s. | | 6 <i>d</i> . | to 4s. | | 676 | 111 | .6 | | 9 | |
| Vernacular | | d. to √2d. | <i>¾ d</i> .to: | 3 <i>d</i> | 3/4 (| d. to 9 d. | 1058 | 1569 | 186 | 50 | | 27 | 2350 |
| Training Schools | | | - | | | | | 1087 | 204 | 11 | | | 728 |
| Total | | | - | | | | 1058 | 4599 | 663 | 35 | | 36 | 3078 |
| | | | | | R | ECEIP | TS—a | contin | ued. | | | | |
| CLASS. | | Mu | unicipalities. | | | | Privat | e. | | | F | ees. | |
| | | 1855- 56. | 1865- 65. | | 82- 3. | 1855- 56. | 1865 66. | - 1882 83 | | 185: 56. | | 865- 66. | 1882- 83. |
| Government. | | £ | £ | | £ | £ | £ | £ | | £ | | £ | £ |
| High School | | | | | | | | 392 | 2 | | | 551 | 1716 |
| Anglo-vernacular | , | | | 6 | 66 | | | 118 | 0 | | | 448 | 2331 |
| Vernacular | | | | 9 | 94 | 72 | 17 | 670 | 5 | | | 510 | 1181 |
| Training Schools | | | | - | | | | 110 | 5 | | | | |
| Total | | | | 1 | 60 | 72 | 17 | 236 | 4 | | 1 | 509 | 5228 |

Poona School Returns, 1855-56, 1866-66, and 1882-83—continued.

| | | | | EIPTS- | | | Е | XPENI | JTIC | JRE | ·· | | | |
|----------------------|-----------|---------------|--------------|--------------|--------------|-----------------------------|--------------|--------------|------|-----------|-------------|-------|--------------|--|
| CLASS. | | | To | otal. | | Inspection and Instruction. | | | | | Buildings. | | | |
| | 183 50 | | 1865- 66. | | 1882- 83. | 1855- 56. | 1865 66. | - 188 83 | | 186 56 | | | 1882- 83. | |
| Government. | f | E | ć | £ | £ | £ | £ | £ | | £ | £ | , | £ | |
| High School | - | - | 18 | 818 | 3726 | | 1597 | 342 | 29 | | | - | 262 | |
| Anglo- vernacular | - | - | 11 | 133 | 4693 | | 1078 | 3 490 |)8 | | 95 | 5 | | |
| Vernacular | 11 | 30 | 21 | 23 | 6161 | 1217 | 1919 | 642 | 22 | | 10 |) | | |
| Training Schools | - | - | 10 |)87 | 2885 | | 834 | 173 | 14 | | | - | 27 | |
| Total | 11 | 30 | 61 | 61 | 7,465 | 1217 | 5428 16,4 | | 73 | | 10 | 5 | 289 | |
| | | |] | EXPE | NDITU | RE—co | ontinue | d. | | С | OST ' | TC |) | |
| CLASS. | | Scholarships. | | | | | Total. | | | Go | vernn | ner | nt. | |
| | | 1865 56. | | 1865- 66. | 1882- 83. | 1855- 56. | 1865- 66. | 1882- 83. | | 55- 6. | 1865 56. | - . | 1882- 83. | |
| Government. | | £ | | £ | £ | £ | £ | £ | | £ | £ | | £ | |
| High School | | | | 91 | 132 | | 1688 | 3823 | - | | 1260 |) | 1618 | |
| Anglo-vernacular | | | | 1 | | | 1173 | 4908 | - | - | 676 | | 1116 | |
| Vernacular | | | | 1 | | 1217 | 1929 | 6422 | 10 |)54 | 1569 |) | 1840 | |
| Training Schools | | | | 273 | 1145 | | 1107 | 2886 | _ | | 1037 | 7 | 2042 | |
| Total | | | | 364 | 1277 | 1217 | 5897 | 18,039 | 10 |)54 | 4542 | 2 | 6616 | |
| | | | | | | COST | ТО—с | ontinue | d. | | | | | |
| CLASS. | | | Lo | ocal Co | ess. | Other Funds. | | | | Total. | | | | |
| | | 1855 | 5- | 1865- | 1882- | 1855- | 1865- | 1882- | 185 | 6- 1 | 1856- | 1 | 882- | |

| | 56. | 66. | 83. | 56. | 66. | 88. | 56. | 66. | 88. |
|------------------|-----|-----|------|-----|------|------|------|------|--------|
| Government. | £ | £ | £ | £ | £ | £ | £ | £ | £ |
| High School | | 1 | | 1 | 418 | 2205 | | 1688 | 3823 |
| Anglo-vernacular | | 9 | | 1 | 488 | 3792 | | 1173 | 4908 |
| Vernacular | | 27 | 2350 | 163 | 423 | 2232 | 1217 | 1929 | 6422 |
| Training Schools | | | 728 | | 20 | 116 | | 1107 | 2886 |
| Total | | 36 | 3078 | 163 | 1319 | 8345 | 1217 | 5897 | 18,039 |

TOWN SCHOOLS.

Poona.

A comparison of the present (1882-83) provision for teaching the town and the country population gives the following results:

High School.

In the town of Poona there were twenty-four Government schools with 3437 names and an average attendance of about 2955 pupils. Of these schools one was a High School, seventeen were Marathi schools eleven for boys and six for girls, one was an Urdu school, two were Anglo- Vernacular schools, one was a Drawing Class attached to the High School, and two were Training Schools or Colleges. The average yearly cost for each pupil in the High School was £6 3s. 6d. (Rs. 61¾); in other schools the cost varied from £21 1s. 3d. to 10s. 2d. (Rs. 210½ to Rs. 5½). Since 1870, 332 or an average of twenty-four pupils a year have passed the matriculation examination from the High School. [The details are: 1870, eleven; 1871, fourteen; 1872, twenty-five; 1873, twenty-nine; 1874, eighteen; 1875, twenty-nine; 1876, twelve; 1877, twenty; 1888, twenty-one; 1879, thirty; 1880, twenty-eight; 1881, twenty-three; 1882, thirty-five; 1883, thirty-seven.]

Training Schools.

Of the two training schools one is intended for males and the other for females. The one for males, which was established in 1857, is situated in Patvardhan's Vada in Sadashiv Peth. It is maintained for the instruction of vernacular masters and assistant masters in the profession of teaching. Admission of students depends upon their rank in the results of the Sixth Standard Public Service examinations held during the previous eighteen months. Subsistence allowance varying from 12s. to 16s. (Rs. 6 - 8) is granted to a certain number of students and a certain number of free students are also admitted. No student is passed for a mastership or assistant mastership worth from £1 to £2 10s. (Rs. 10 - 25) unless he has been at least two years in the school and undergone the prescribed test. In 1882-83 there were 127 pupils and the total cost amounted to £1984 14s. (Rs. 19,847) or about £18 (Rs. 180) a pupil. A boarding house is attached to the school, which is situated

in Pethe's Vada in Kasba Peth. The training school for females which was established in 1870 is situated in Abhyanker's Vada in Shukravar Peth. Subsistence allowance varying from 10s. to 16s. (Rs. 5-8) is granted to a certain number of students and a certain number of free students are also admitted. Passed students are guaranteed employment by the Educational Department in the town or village where their husbands or other male guardians are employed as schoolmasters. In 1882-83 there were forty-six pupils and the total cost amounted to £950 (Rs. 9500) or £30 (Rs. 300) a pupil.

Deccan College.

Besides these schools there are two colleges in Poona, the Deccan Arts College and the College of Science. The Deccan College as before stated owes its rise to the old Sanskrit College established in Poona in 1821. In 1837 some branches of Hindu learning were dropped, the study of the vernacular and of English was introduced, and the college was opened to all classes, and after having been amalgamated with the English school in 1851 it arose in its present form in 1857 by a separation of the college division from the school division. Prom a portion of the, Dakshina Fund, Dakshina Fellowships have been founded of which four fellowships, one senior of £10 (Rs. 100) a month and three junior of £7 10s. (Rs. 75) each are attached to this college. In 1863 Sir Jamsetji Jijibhai, Bart., offered to Government £10,000 (Rs. 1 lakh) to provide suitable buildings for the college. In 1868 the buildings were occupied and the college was named the Deccan College. The college is endowed by Government with ten senior scholarships, three of the value of £2 (Rs. 20) and seven of the value of £1 10s. (Rs. 15) a month, and eleven junior scholarships of) the value of £1 (Rs.10) all tenable for one year. Of private endowments there are two scholarships of 8s. (Rs.4) each, one for Marathi and one for Sanskrit. These were founded in 1857 in the name of the late Major Candy the Principal of the college. In 1877 to perpetuate the memory of Mr. W. H. Havelock, C. S., some time Revenue Commissioner Southern Division, a prize of the value of £8 (Rs. 80) to be awarded yearly was established by members of the Bombay Civil Service, In 1879 another yearly prize of £4 (Rs. 40) was established by Mr. Vishnu Moreshvar Mahajani, M.A., some time a student and fellow of the college. The college staff consists of the Principal who is also a professor of English, drawing a monthly salary of £125 (Rs. 1250) and three professors, of logic and moral philosophy, mathematics, and oriental languages, each drawing from £50 to £100 (Rs. 500 -1000), an assistant professor of oriental languages drawing £25 (Rs. 250), a lecturer on physics drawing £13 (Rs. 130), two shastris or Sanskrit teachers one drawing £7 10s. (Rs. 75) and the other £5 10s. (Rs. 55), and four Dakshina fellows drawing in the aggregate £32 10s. (Rs. 325). The number of pupils in 1858-59 when the college was separated from the English school was forty-two, and it gradually rose to 107 in 1874-75, fell in 1877-78 to seventy-one, and again rose to 150 in 1882-83. The college fee is 10s. (Rs. 5) a month; and in 1882-83 the receipts amounted to £724 6s. (Rs. 7243) and the charges to £5117 8s. (Rs. 51,174) or a cost of £34 2s. (Rs. 341) for each pupil. In the same year of thirty-four students seventeen were successful in the university examinations.

Science College.

The College of Science arose out of a school established in Poona in 1854 by Government at the suggestion of Lieutenant-Colonel Walter Scott, BombayEngineers, for the purpose of educating subordinates of the Public Works Department. To assist in providing a new profession for his fellow-countrymen, Kavasji Jahangirji Ready-money, Esquire, presented to Government a sum of £5000 (Rs. 50,000) towards the erection of a suitable building for that purpose in July 1863. The foundation stone of the new college was laid by His Excellency Sir Bartle Frere on the 5th of August 1865, and the building was completed in the latter part of the year 1868.

In 1865 the Poona Engineering School was affiliated to the Bombay University and thus became one of its colleges. The college is under the Educational Department, and the college business is conducted by a staff consisting of the principal, three professors drawing from £50 to £100 (Rs. 500 - 1000), one agricultural instructor, one superintendent of workshops, two lecturers one on botany and the other on veterinary, one drawing-master, and five other teachers, the total cost to Government being £550 16s. (Rs. 5508) a month.

The college commenced with fourteen pupils in 1855, and during the seven years ending 1861 the number varied between seven in 1858 and twenty-two in 1856 and averaged thirteen. During the the next nine years (1862 - 1870) the number varied between thirty-four in 1862 and ninety-two in 1869-70, and averaged sixty-three. In 1871 it increased to 136 and fell to 113 in 1873. During the next ten years (1874 - 1883) the number varied between 151 in 1883 and 210 in 1879 and averaged 177.

In 1868 only one candidate for the first time got the degree of Civil Engineering, and since that date the degree has been obtained by 142 candidates. The students of the college are arranged in four departments: First, matriculated students are educated through the English language for university degrees in Civil Engineering, Government guaranteeing one appointment every year as assistant engineer third grade in the engineering branch of the Public Works Department to that student who shall obtain the first place in the first class at the university examination for the degree of L.C.E. To the next three in order Government also offer appointments in the subordinate branch of the Public Works Department. Second, matriculated students who study scientific agriculture in the college and on the farm attached to it, on passing the final examination, obtain certificates of qualification from the college. Candidates who pass the final examination of the agricultural class have a preferential claim for situations in the Revenue Department up to £3 (Rs. 30) over candidates in or out of the service who have merely matriculated. Candidates who pass the final examination of the high school agriculture classes are admitted to the college as agricultural apprentices. They are allowed the full privileges enjoyed by the college class after passing the matriculation examination. Third, matriculated students who enter the forest class of the college have six appointments guaranteed annually to them by the Bombay Forest Department. Fourth, apprentices who prosecute their studies in the college workshops are given practical instruction in the use of machinery. To the apprentices who pass the final examination of this department three appointments as sub-overseers are annually guaranteed by the Public Works Department in the Bombay Presidency. Besides the Frere scholarship of the value of £2 10s. (Rs. 25)

a month, thirty-four yearly scholarships of the value of from 6s. to £1 10s. (Rs. 3- 15) a month are attached to the engineering department, nineteen scholarships of the value of 10s. to £1 4s. (Rs. 5 - 14) a month are attached to the agricultural department, and twelve scholarships of the value of 14s. to 18s. (Rs. 7-9) are attached to the forest department of the college.

During the five years ending 1882-83 the receipts amounted to £2897 6s. (Rs. 28,973) and the charges to £33,346 6s. (Rs. 3,33,463), the cost per pupil being £32 14s. (Rs. 327).

Private Schools.

In addition to the Government schools, there were in 1882-83 forty-five private schools in the town of Poona, with, out of 2868 names on the rolls, an average attendance of 2299 pupils.

The following are the available details about some of these schools: The Bishop's High School was established in 1864. In 1882-83 it was in an efficient state having passed five candidates in the matriculation examination and having 110 names on the rolls and an average attendance of ninety-eight. The school-fee was 10s. (Rs. 5) and the cost per pupil about £8 (Rs. 80). The St. Vincent Roman Catholic High School teaching only up to the fifth anglo-vernacular standard was established in 1867. In 1882-83 it was in an efficient state having 210 names on the rolls and an average attendance of 176. The school-fee varied from 1s. to 10s. (Rs.½-5) and the cost per pupil amounted to about £2 10s. (Rs. 25). The Free Church Mission Institution was established in 1866. In 1882-83 it was in an efficient state having passed four candidates in the matriculation examination and having 170 names on the rolls and an average attendance of 158. The school-fee varied from 1s. 6d. to 2s. (Rs. ³/₄-1) and the cost per pupil amounted to about £3 10s. (Rs. 35). The Poona Native Institution was established in 1866. In 1882-83 it was in an efficient state having passed three candidates in the matriculation examination and having 199 names on the rolls and an average attendance of 155. The cost per pupil amounted to £2 10s. (Rs. 25). The Pensioners' Middle Class school for boys and girls was established in 1864. In 1882-83 it was in a satisfactory state having fifty-seven names on the rolls and an average attendance of forty-three. The school-fee varied from 6d. to 4s. (Rs. i-2) and the cost per pupil amounted to about £4 10s. (Rs. 45). The Conference Middle Class School was established in 1879. In 1882-83 it was in a satisfactory state having fifty-six names on the rolls and an average attendance of forty-two. The school-fee was 8s. (Rs. 4) and the cost per pupil about £5 (Rs. 50). The Mission Orphanage and Christian Boys Middle Class School Panch Haud was established in 1879. In 1882-83 it had ten names on the rolls and an average attendance of five. The cost per pupil was about £910s. (Rs. 95). The Victoria Girls High School was established in 1876. In 1882-83 it was in an efficient state having passed three girls in the matriculation examination and having ninety-six names on the rolls and an average attendance of sixty-four. The cost per pupil amounted to about£9 10s. (Rs. 95). The St. Mary's Girls High School was established in 1867. In 1882-83 it was in an efficient state having passed one girl in the matriculation examination and having 121 names on the rolls and an average attendance of 106. The cost per pupil amounted to £9 (Rs. 90). The Convent High School for girls was established in 1860 by

the Roman Catholic Bishop of Bombay. In 1882-83 it was in an efficient state having passed two girls in the matriculation examination and having 119 names on the rolls and an average attendance of 118. The cost per pupil amounted to about £9 10s, (Rs. 95). The Scottish Girls High School had in 1882-83 nineteen names on the rolls and an average attendance of twelve. The cost per pupil amounted to about £9 10s. (Rs. 95). The St. Anne's Middle Class School for girls was established in 1873. In 18S2-83 it was in a satisfactory state having twenty-four names on the rolls and an average attendance of seventeen. The cost per pupil amounted to about £3 (Rs. 30). The Zauana Mission Anglovernacular School for girls was in 1882-83 in a satisfactory state having nine names on the rolls and an average attendance of eight. The cost per pupil amounted to about £1 (Rs. 10). The Free Church Mission Vernacular Boys School in Aditvar Peth was established in 1876. In 1882-83 it was in a satisfactory state having 172 names on the rolls and an average attendance of 106. The cost per pupil amounted to about 10s. (Rs. 5). The Mission Orphanage Panch Haud Vernacular School was in 1882-83 in a satisfactory state having thirty-eight names on the rolls and an average attendance of twenty-nine. The cost per pupil amounted to about £9 (Rs. 90). The Free Church Mission Girls Vernacular School in the camp- was established in 1850. In 1882-83 it was in an efficient state having forty-five names on the rolls and an average attendance of thirty-eight. The past per pupil amounted to about £9 (Rs. 90). The Zanana Mission Girls Vernacular Schools in Shukravar Peth Sadashiv Peth. Civil Lines and Kamathipura were all of them in 1882-83 in a satisfactory state having from forty-seven to fifty-four names on the rolls and an average attendance of from thirty to fifty-four. The cost per pupil varied from 14s. to £3 (Rs. 7-30) The Free Church Mission Girls Vernacular school in Aditvar Peth was in 1882-83 in a satisfactory state having seventy-eight names on the rolls and an average attendance of forty-three. The cost per pupil amounted to about 10s. (Rs. 5). The Bene-Israel Girls Vernacular School in Rastya's Peth was in 1882-83 in a satisfactory state having fifty-nine names on the rolls and an average attendance of thirty-four. The cost per pupil amounted to £3 10s. (Rs. 35).

New English School.

The New English School was established on the 2nd of January 1880 by the late Mr. Vishnu Krishna Chiplunkar, B.A., a son of the well known Krishna Shastri Chiplunkar, chiefly with the object of facilitating and cheapening education among the people. The school began with nineteen boys, and at the end of January 1885 there were about 1200 students on the rolla The school fees vary from 1s. Ad, to 4s. (Rs. ¾- 2), and about fifteen per cent free and half-free scholars are admitted and there are monthly scholarships of the total value of £5 (Rs. 50), mostly paid from the school proceeds. During the five years of its existence eighty students or on an average sixteen a year passed the matriculation examination and succeeded every year in socuring at least one of the two University Jagannath. Shankarsheth Sanskrit scholarships.[The details are: 1880-81, eight; 1881-82, five; 1882-83, eight teen; 1883-84, four, teen; and 1884-85, thirty-five,]

Deccan Education Society.

The promoters of the school established, on the 24th of October 1884, a society called the Deccan Education Society to facilitate and cheapen education by starting affiliating or incorporating at different places, as circumstances permit, schools and colleges under native management, or by any other ways best adapted to. the wants of the people. The society during the short time of its existence has secured endowments of the value of about £8000 (Rs. 80,000) and has succeeded in establishing an Arts College in Poona after the name of His Excellency Sir James Fergusson, Governor of Bombay. The Fergusson College has been recognized by the University of Bombay for the purposes of the Previous examination provisionally for three years. The number of students on the college rolls is about eighty and the staff of teachers consists of five Bombay University graduates. The college fee is 8s. (Rs. 4) a month; seven scholarships of the total value of £6 (Rs. 60) are awarded every month and ten per cent free students are allowed. The Government of Bombay has been pleased to grant the Budhvar Yada site to the society under reasonable conditions, where the society intend to erect a large building so as to accommodate the New English School and the Fergusson College together. The foundation stone of this building was laid by His Excellency Sir James Fergusson on the 5th of March 1885.

In the town of Kirkee near Poona there were, in 1882-83, three schools with 131 names and an average attendance of 113 pupils. The average yearly cost per pupil varied from 1s. 11/8d. to 8s. 107/8d. (83/4 as.-Rs. 4 as. 7 1/4). In the town of Junnar there were three schools with 384 names and an average attendance of 308. The average yearly cost per pupil was 11s. 93/4 d. (Rs. 5as. 141/2). In the town of Indapur there was one school with 164 names and an average attendance of 118. The average yearly cost per pupil was 11s. 01/4d. (Rs. 5 as. 81/6). In the town of Talegaon Dabhade in Maval there were two schools with 193 names and an average attendance of 145. The average yearly cost per pupil was 15s. $7\frac{1}{2}d$. (Rs. $7\frac{13}{16}$)In the town of Khed there was one school with 138 names and an average attendance of 117. The average yearly cost per pupil was 16s. 2¹/₄d. (Rs. 8 as. 1½). In the town of Sasvad there were two schools with 255 names and an average attendance of 206. The average yearly cost per pupil was 13s. 4d. (Rs. 6 as. 10²/₅). In the town of Utur in Junnar there were two schools with 194 names and an average attendance of 156. The average yearly cost per pupil was 12s. 5 3/8d. (Rs. 6 as. 31/12). In the town of Ghodnadi in Sirur there were two schools with 192 names and an average attendance of 125. The average yearly cost per pupil was 16s. 1%d. (Rs. 8 as. 1¼). In the town of Talegaon Dhandhere in Sirur there was one school with ninety-three names and an average attendance of sixty-six. The average yearly cost per pupil was 18s. 93/8d. (Rs. 9 as. 61/4). In the town of Baramati in Bhimthadi there were three schools with 234 names and an average attendance of 180. The average yearly cost per pupil was 9s. 95%d. (Rs.4) as. $14^{5/12}$).

VILLAGE SCHOOLS.

Exclusive of the eleven towns of Poona, Kirkee, Junnar, Indapur, Talegaon Dabhade, Khed, Sasvad, Utur, Ghodnadi, Talegaon Dhandhere, and Baramati, the district of Poona was, in 1882-83, provided with 219 schools, or on an average one school for every five

inhabited villages. The following statement shows the distribution of these schools by sub-divisions:

Poona Village Schools. 1882-83.

| SUB- DIVISION. | Villages. | Population. | Number of Schools. | | SUB- | Villages. | Population. | Number of Schools. | |
|-------------------|-----------|-------------|--------------------|-------|-----------|-----------|-------------|--------------------|--------|
| DIVISION. | | - | Boys. | Girls | | | - | Boys. | Girls. |
| Junnar | 158 | 86,120 | 23 | | Bhimthadi | 129 | 105,156 | 32 | |
| Indapur | 85 | 43,872 | 20 | | Haveli | 235 | 180,188 | 43 | |
| Khed | 243 | 134,875 | 43 | | Maval | 162 | 67,483 | 16 | |
| Sirur | 74 | 64,801 | 20 | 1 | | | | | |
| Purandhar | 91 | 69,994 | 23 | 1 | Total | 1177 | 742,489 | 219 | 2 |

LIBRARIES.

Besides the Poona Native General Library, the United Service Library, and. the Poona Camp Library, there are two reading-rooms one each at Sasvad and Rastia's Peth in Poona. The reading-rooms at Indapur, Talegaon Dhamdhere, Pabal, Jejuri, and Talegaon Dabhade have all been closed. The Poona Native General Library was established in 1848 under the auspices of Mr. J. Warden, Agent fob Sardars, assisted by Rav Bahadur Gopalrav Hari Deshmukh, Moro Raghunath Dhamdhere, Khan Bahadur Padamji Pestanji, A'ba Saheb Shastri Patvardhan, and others, many of whom presented the institution with books and granted donations. Subsequently the late Mr. 0. R. Ovans of the Bombay Civil Service did much to improve the institution. In 1872 the library received three donations. In 1879 the library which was situated in the Budhvar palace was destroyed by fire and a new one started. In 1884 it contained 913 books and subscribed for sixteen newspapers and four journals. The cost was defrayed by ninetytwo subscribers paying in all about £65 (Rs. 650) and by grants amounting to about £16 (Rs. 160). The United Service Library was established in 1860 and contained in 1884 upwards of 1000 volumes and subscribed for twenty-three newspapers and twenty periodicals. The cost was defrayed by 140 subscribers paying in all £480 (Rs. 4800). The Camp Library was established in 1881 and contained, in 1884, 895 volumes and subscribed, besides eleven received gratis, for seventeen newspapers and periodicals, the cost being defrayed by seventy-seven subscribers paying in all £69 10s. (Rs. 695). The Reading-rooms at Rastya's Peth in Poona and at Sasvad were established in 1881 and 1860 respectively, contained about 600 volumes each, and subscribed for from six to nine papers each. The cost which was about £11 and £7 10s. (Rs. 110 and 75) was defrayed by fifty and forty members respectively.

DAKSHINA PRIZE COMMITTEE.

The Dakshina, as mentioned before, was a charitable grant originally made by Dabhade the Senapati of the Maratha empire from the revenues of the state, and on the decline of the power of that family it was continued by the Peshwas. It was a yearly allowance and was distributed chiefly to learned Brahmans and Vaidiks and also to poor people of the same class; the larger amounts, however, were given to Pandits or Shastris of distinguished learning, or to those Brahmans who passed, with distinction the examination in the Sanskrit sciences which was held in the presence of the Peshwa and his court. The usual amount thus distributed was about £8500 (Rs. 85,000). After the conquest of the Deccan, Mr. Elphinstone continued the allowance fixing the annual grant at £5000 (Rs. 50,000). It was a voluntary act of that able officer which manifestly had its origin in a motive of state policy and in a desire to conciliate the most influential class of the people. The grant under such circumstances plainly imposed no obligation on the part of Government to continue it, nor any guarantee to refrain from interfering with the arrangements under which it would be distributed.[Mr. Lumsden, January 1850, General Record 26 of 1850, 89-90.] Of the £5000 (Rs. 50,000) sanctioned, £2000 (Rs. 20,000) were shortly afterwards alienated to defray the expenses of the Hindu college at Poona. In 1837 the balance of £3000 (Rs. 30,000) was declared to be available for general purposes of promoting education and rewarding those who distinguished themselves in the acquisition of science, and in 1838 Government resolved to exclude those who had no pretensions to learning and' to restrict the grant to old candidates who were proficieuts in useful branches of literature. In 1839, in consequence of the whole sum of £3000 (Rs. 30,000) being absorbed in the payment of annuities awarded in previous years, it became necessary to refuse new candidates and this refusal was continued till 1849.when by the lapse of annuities an annual sum of £689 8s. (Rs.'6894) was available out of the allowance of £3000 (Rs. 30,000), while from the balance of past years there had accumulated upwards of £2500 (Rs. 25,000). As the savings by the lapse of shares was expected to progressively increase, Government were induced at the recommendation of the Agent for Sardars in the Deccan to authorise a new distribution of £300 (Rs. 3000) a year. Of this sum one-half was authorised to be reserved for candidates belonging to the classes declared in 1838 to be eligible to participate in the Dakshina. The management of this fund was entirely in the hands of the Agent. The other half was authorised to be distributed as prizes for useful works in Marathi written by natives of India. The amount to be so appropriated was divided into eleven shares or prizes for the distribution of which a committee was appointed composed of the Agent for Sardars in the Deccan as president and nine members, including the Collector of Poona, the assistant agent for Sardars, the Principal Poona College, the Principal Sadar Amin of Poona, inspecting Shastri, secretary to the Poona Native General Library, and three other natives to be selected by the president. The Agent for Sardars and Major Candy were consulted as to the best means of disposing of the entire available balance of the Dakshina fund both present and prospective. At the end of 1850 there was an accumulated balance of £2699 6s. (Rs. 26,993) and an available yearly sum of £489 (Rs. 4890). Of the £2699 6s. (Rs. 26,993) it was proposed to form a fund for professorships contemplated in the scheme for. amalgamating the Poona Sanskrit College and the Government English School at Poona. To make up the deficiency in the financial arrangements of the new institution it was proposed to appropriate from the Dakshina a further annual sum of £103 14s. (Rs. 1037). It was also recommended that £10 (Rs. 100) a month or £120 (Rs. 1200) a year

should be devoted to the endowment of a professorship of the vernacular languages in the new college, and £16 (Rs. 160) a month or £192 (Rs. 1920) to the foundation in the same institution of four translation exhibitions of £4 (Rs. 40) each. The balance of £73 6s. (Rs. 733) a year and the subsequent annual increase from lapsed shares, it was proposed, to apply to the formation of a general fund for the encouragement of native literature and education. The chief items were to reward writers of useful practical works in Marathi either original or translated, to print such works as seemed worthy of publication, to reward with gratuities old and meritorious vernacular schoolmasters, and to grant occasional assistance to societies engaged in promoting the improvement of native literature. The proposal received the sanction of Government. In 1856, Government decided that the Dakshina should be transferred to the Educational Department. The annual balance increased from year to year by the lapse of annuities to Brahmans. In 1857, Mr. Howard, the Director of Public Instruction, proposed to apply the increasing balance to the foundation of fellowships in the Poona college. This proposal was sanctioned by Government and as the pensions to Brahmans fell in, money was found for the foundation of Fellowships in the Elphin-stone College and in the new Gujarat College. Grants were also made to the Training Colleges at Poona and Dharwar, and the balance of the fund was spent on prizes and rewards to authors. In course of time the Poona College and the institutions which grew out of it, the High School and the Training College, were placed upon the Imperial or Provincial budget; but the balance of the Dakshina, amounting to £2068 (Rs. 20,680) a year has been continued as a separate fund and its receipts and charges for 1882-83 were as under:

Dakshina Fund Receipts and Charges, 1882-83.

| RECEIPTS. | | CHARGES. | |
|---|------|---|-----|
| | £ | | £ |
| Amount sanctioned by Government for twelve months from 1st April 1882 to 31st March 1883. | 2068 | Allowance to Senior and junior Dakshina Fellows, Elphinstone College. | 432 |
| | | Allowance to Senior and Junior Dakshlna Fellows, Deccan College. | 390 |
| | | Allowance to Dakshina Fellows, Gujarat College. | 135 |
| | | Salary of the Secretary | 78 |
| | | Salary of the Establishment | 30 |
| | | Salary of the Dakshina Examiner's Clerk. | 8 |
| | | Salary of the Dakshina Fund Accountant. | 47 |

| | | Scholarship Allowance, Poona Training College. | 108 |
|-------|------|--|------|
| | | Contribution to Boarding House, Poona. | 60 |
| | | Contribution to Boarding House, Dhar-war. | 60 |
| | | Office Rent | 2 |
| | | Contingencies | 7 |
| | | Allowance to the Sanskrit Class at Nasik. | 12 |
| | | Rewards to Authors | 569 |
| | | Dakshina to Brahmans ¹ | 130 |
| Total | 2068 | Total | 2068 |

¹ The number of Brahmans still on the Dakshina fund list is 109.

SARVAJANIK

The Poona Sarvajanik Sabha or the People's Association at Poona was founded on the 2nd of April 1870 (New Year's Day 1792 S.) under the auspices of the Pant Pratinidhi, the Chief of Aundh in Satara, with the object of promoting the political welfare and advancing the interest of the people of this and other parts of the country. The members include, besides a few Deccan Sardars and Inamdars, Government servants chiefly in the Educational and Judicial Departments, pensioners, and a few pleaders. The association since its constitution has discussed and made representations to Government on many important subjects. A quarterly magazine in English issued by the association contains, besides a full report of the proceedings, ably written articles on current political topics. The Poona association had given birth to similar associations in other parts of the Deccan, but none of them have been of any importance.

VAKTRITVOTTEJAK SABHA.

The Poona Society for the encouragement of elocution or *Vaktritvottejak Sabha* was started in 1868 by some of the leading men of the town. The object of the society is to encourage public speaking by giving prizes to good Marathi speakers. Two or three subjects, political, social, or religious, are announced every year by the secretary, and candidates are invited to speak on those subjects at a public meeting to be held two months after the issue of the notice. A committee of five or six members chosen from the audience decides the merits of the speakers and awards the prizes which range between £1 to £5 (Rs. 10-50) to the successful competitors.

NEWSPAPERS.

Besides two weekly English newspapers the *Deccan Herald* and the *Poona Observer*, conducted by Europeans, seven newspapers and four magazines are conducted by natives in the city of Poona. Of the seven native newspapers one the Maratha a weekly paper with a circulation of 460 copies and a yearly subscription of 14s. 6d. (Bs. 7¹/₄) is conducted in English; two the *Dnyan Prakash* or the Light of Knowledge, a bi-weekly paper with a circulation of 500 copies and a yearly subscription of 16s. (Rs. 8) and the Dnyan Ohakshu or the Eye of Knowledge, a weekly paper with a circulation of 1300 copies and a yearly subscription of 4s. (Rs. 2) are conducted in English and Marathi; three, the *Kesari* or the Lion with a circulation of 4350 copies and a yearly subcription of 2s. (Re. 1), the Pune Vaibhav or the Glory of Poona with a circulation of 450 copies and a yearly subscription of 6s. (Rs. 3), and the Shivaji, so called after the founder of the Maratha empire of that name, with a circulation of 200 copies and a yearly subscription of 4s. (Rs. 2) are weekly papers conducted in Marathi and one the Military Instructor with a circulation of 330 copies and a yearly subscription of 6s. (Rs. 3) is a weekly paper conducted in English Marathi and Urdu. Of the four magazines the Journal of the Poona Sarvajanik Sabha with a circulation of 750 copies and a yearly subscription of 8s. 6d. (Rs. 4¹/₄) is a quarterly conducted in English; and the *Lokahitavadi* or the Advocate of the People's Good with a circulation of 265 copies and a yearly subscription of 2s. (Re. 1), the Nibandha Chandrika or the Essay Moonlight with a circulation of 400 copies and a yearly subscription of 5s. (Rs. 2½), and the Pune Sarvajanik Sabheche Masik Pustak or the Monthly Journal of the Poona Sarvajanik Sabha with a circulation of 200 copies and a yearly subscription of 8s. (Rs. 4) are monthly magazines conducted in Marathi. The Dnydn Prakdsh is the oldest paper in the Presidency. The Mardtha and the Kesari are twin papers under the same editors and their prevailing tone is unfriendly to Government. The same may be said of the *Pune Vaibhav*. The *Kesari* has the largest circulation of any paper. The Quarterly Journal of the Sarvajanik Sabha in English is conducted with care and ability. The other papers and magazines are conducted with average ability.



HEALTH

CLIMATE.

OWING to the elevation of the district, the trap formation of the surrounding country, the absence of alluvial deposits, and the general prevalence of westerly sea breezes and good water, the Poona climate is dry and invigorating and suits European constitutions better than that of most other parts of India. The air is lighter, the cold more bracing, and the heat less oppressive. There are several hill sanitariums, Sinhgad, Purandhar, Khandala, and Lonavla. Poona is the seat of the Government during the rainy season and is the resort of many rich Bombay families, and was once intended to be made the permanent seat of the Bombay Government and of the Viceregal court. [Deccan Scenes, 10. The Earl of Elgin intended to come round to Poona for the wet season of 1865. 400 acres of ground were taken and a palace was to be built for the Viceroy's residence. The lamented death of the Earl, however, put a stop to these arrangements and the next Viceroy did not concur in his predecessor's views.] Poona may be said to be healthy all the year round, but if one time is more unhealthy than another it is the period between June and

November. The languor, which in almost every season of the year is found in most parts of India, is hardly experienced in Poona even in the hot weather.

DISEASES.

The prevailing diseases, which are chiefly of the endemic class, are fever, ague, and diseases of the liver and bowels, and violent colds and catarrhs. The thermometer sometimes varies from twenty to thirty degrees in the course of the day and night, and at the breaking up of the rains there is a succession of cool breezes and hot sunshine which cannot fail to be injurious to those who are obliged to endure the full force and rapidity of the changes. It is at this period that all those complaints symptomatic of a deranged state of the liver are most prevalent. During October and November, owing to the cessation of the rainy season and the elevated temperature, remittent and intermittent fevers with viscerial diseases prevail and are the cause of greater mortality than any other disease. Fevers of the ephemeral and intermittent classes are more prevalent than those of the remittent type. Simple continued and typhoid fevers are very rare. Dysentery and all bowel complaints are prevalent at the commencement and during the rainy season. Cholera as epidemic is rare though sporadic cases occur annually. During the hot season small-pox, chicken-pox, and measles prevail among the native population and eruptive and other forms of fever among Europeans.

HOSPITALS.

1882.

Besides the Sassoon General Hospital, the Roman Catholic Orphanage, and the Charitable Infirmary and Leper Hospital at Poona, the district had in 1882 one endowed and nine grant-in-aid dispensaries. Of 74,100 patients treated 71,507 were out-patients and 2593 in-patients. The total cost was £4744 (Rs. 47,440). The following details are taken from the 1882 report:

Sassoon General Hospital.

The Sassoon General Hospital has a building of its own. The commonest diseases treated were malarious fevers, lung diseases, syphilis, bowel complaints, and poisons and injuries. Cholera appeared sporadically from May till October and eleven cases were reported, all of which proved fatal. Small-pox broke out in an epidemic form in February and 126 deaths occurred from this disease alone. There were fifty-one major operations performed, all important ones, including seven amputations and fourteen lithotomies; two were discharged cured, fifteen were relieved, and four died. The diseases which principally caused the mortality were malarious fevers, lung and bowel complaints, cholera, syphilis, and poisons and injuries. 12,542 out-patients and 1933 in-patients were treated at a cost of £3289 (Rs. 32,890).

Roman Catholic Orphanage.

The Roman Catholic Orphanage has a building of its own. The general health of the children was fairly good. With the exception of a slight outbreak of chicken-pox in March and one case of small-pox in December, no epidemic occurred. The commonest diseases were bronchial catarrh, ague, colic, diarrhoea, and dysentery. The total number of patients was 530 and the cost was £139 (Rs. 1390).

DISPENSARIES.

Sasvad.

The Sasvad dispensary has no building of its own. The most prevailing diseases were malarious fevers, conjunctivitis, respiratory affections, bowel complaints, and skin diseases. There was no epidemic. 243 children were vaccinated. 5287 out-patients and fourteen in-patients were treated at a cost of £132 (Rs. 1320).

Jejuri.

The Jejuri dispensary was opened in 1872. The prevailing diseases were malarious fevers, ophthalmia, diseases of the stomach and bowels, respiratory affections, and skin diseases. Cholera appeared in the month of April, and out of ten persons attacked four died. Eighty-seven children were successfully vaccinated. 4170 out-door and five in-door patients were treated at a cost of £99 (Rs. 990).

Baramati.

The Baramati dispensary was established in 1873. The prevailing diseases were malarious fevers, ophthalmia, bowel complaints, intestinal worms, and skin diseases. Cholera appeared towards the end of the year and there were thirty-two cases with seven deaths. 161 primary vaccinations were successfully performed. 3103 outpatients and ten in-patients were treated at a cost of £99 (Rs.990).

Indapur.

The Indapur dispensary was opened in 1870. The commonest diseases treated were malarious fevers, ophthalmia, ulcers, and skin diseases. No epidemic occurred in the town, but cholera appeared in the surrounding villages. 157 children were successfully vaccinated. 4419 out-patients and twenty-three in-patients were treated at a cost of £129 (Rs. 1290).

Junnar.

The Junnar dispensary was established in 1869. It has a building of its own in good repair. Malarious fevers, ophthalmia, worms, and skin diseases were the commonest complaints. Cholera, made its appearance in the district but no cases occurred in the town. There were 150 vaccinations. 7475 out-patients were treated at a cost of £78 (Rs. 780).

Khed.

The Khed dispensary was founded in the year 1876. The commonest diseases were malarious fevers, eye affections, skin diseases, and worms. There was no epidemic. 5358 out-patients and three in-patients were treated at a cost of £72 (Rs. 720).

Talegaon Dabhade.

The Talegaon Dabhade dispensary was opened in 1876. Ophthalmia, malarious fevers, skin diseases, ulcers, and worms were the commonest diseases. Two cases of small-pox were observed, but there was no cholera. Seventy-eight children were successfully vaccinated. 6083 out-patients and thirteen in-patients were treated at a cost of £101 (Rs.1010).

Talegaon Dhamdhere.

The Talegaon Dhamdhere dispensary was established in 1876. It is held in a hired building. Skin diseases, ophthalmia, malarious fevers, and bowel complaints including intestinal worms were the prevailing diseases. There was no epidemic. Primary vaccination was successfully performed in 188 cases. 4758 outpatients and four inpatients were treated at a cost of £51 (Rs. 510).

Alandi.

The Alandi dispensary was established in 1882. It is held in a *dharmshala* or rest-house, which is however totally unsuited and in bad repair. The principal diseases treated were malarious fevers and respiratory and bowel affections. There was no epidemic. 1677 outpatients were treated at a cost of £77 (Rs. 770).

Khan Bahadur Pestonji Sorabji.

The Khan Bahadur Pestonji Sorabji endowed dispensary at Poona was opened in 1851. It has a building of its own in good repair. The prevailing diseases were malarious fevers and diseases of the stomach, eyes, chest, and skin. Small-pox and measles prevailed in the city and cantonment. 16,635 out-patients and fifty-eight in-patients were treated at a cost of £478 (Rs. 4780).

INFIRM PEOPLE.

According to the 1881 census, 4164 persons (males 2406, females 1758) or 0.46 per cent of the population were infirm. Of the total number, 3991 (males 2296, females 1695) were Hindus, 153 (males 99, females 54) Musalmans, 13 (males 7, females 6) Christians, 5 (males 2, females 3) Parsis, and 2 (males) Jews. Of 4164 the total number of infirm persons, 257 (males 174, females 83) or 6.17 per cent were insane, 2363 (males 1143, females 1220) or 56.75 per cent were blind, 456 (males 271, females 185) or 10.95 per

cent were deaf-mutes, and 1088 (males 818, females 270) or 2613 per cent were lepers. The details are:

Poona Infirm People, 1881.

| | Hindus. | | Musalmans. | | Christians. | | Parsis. | | Jews. | | Total. | |
|----------------|---------|-----------|------------|---------------|-------------|-----------|---------|---------------|--------|---------------|--------|----------|
| | Males. | Fem-ales. | Males. | Fem- ales. | Males. | Fem-ales. | Males. | Fem- ales. | Males. | Fem- ales. | Males. | Females. |
| Insane | 151 | 77 | 20 | 3 | 2 | 2 | 1 | 1 | | | 174 | 83 |
| Blind | 1087 | 1178 | 53 | 37 | 2 | 3 | 1 | 2 | | | 1143 | 1220 |
| Deaf- Mutea | 261 | 178 | 9 | 6 | | 1 | | | 1 | | 271 | 185 |
| Lepers | 797 | 262 | 17 | 8 | 3 | | | | 1 | | 818 | 270 |
| Total | 2296 | 1695 | 99 | 54 | 7 | 6 | 2 | 3 | 2 | | 2406 | 1758 |

VACCINATION.

In 1883-84, under the supervision of the deputy sanitary commissioner the work of vaccination was carried on by seventeen vaccinators with yearly salaries varying from £16 16s. (Rs. 168) to £28 16s. (Rs. 288). Of these operators fourteen were distributed over the rural parts of the district, two were employed in Poona city, and one in the Poona and Kirkee cantonments. Besides the vaccinators the medical officers in charge of the nine grant-in-aid dispensaries carried on vaccine operations. In 1883-84 the total number of persons vaccinated was 25,746 exclusive of 780 revaccinated, compared with 13,601 in 1869-70. The following statement shows the sex, religion, and age of the persons primarily vaccinated:

Poona Vaccination Details, 1869-70 and 1883-84.

| YEAR. | PERSONS VACCINATED. | | | | | | | | | | | |
|-------------|---------------------|---------|---------|-----------------|---------|-------------|---------|-----------------------|-----------------------|--------|--|--|
| | Sex. | | | | Religio | Age. | | | | | | |
| | Males. | Females | Hindus. | Musal- mans. | Parsis. | Christians. | Others. | Under One Year. | Above One Tear. | Total. | | |
| 1869- 70 | 7242 | 6359 | 11,429 | 641 | 67 | 83 | 1381 | 5463 | 8138 | 13,601 | | |

| 1883- 84 | 13,358 | 12,388 | 21,557 | 1126 | 89 | 297 | 2677 | 14,117 | 11,629 | 25,746 |
|-------------|--------|--------|--------|------|----|-----|------|--------|--------|--------|
|-------------|--------|--------|--------|------|----|-----|------|--------|--------|--------|

In 1883-84, the total cost of these operations, exclusive of those performed in the dispensaries, was £870 (Rs. 8700) or about 8⁵/8. (5¾ as.) for each successful case. The charges included the following items: supervision and inspection £309 12s. (Rs. 3096), establishment £502 10s. (Rs. 5025), and contingencies £57 18s. (Rs. £79). Of these the supervising and inspecting charges were met from Government provincial funds, while £413 2s. (Rs.4131) were borne by the local funds of the different sub-divisions, £81 18.s (Rs. 819) by the Poona municipality for the services of the two vaccinators in the city, and £65 8s. (Rs. 654; by the committee of the Poona and Kirkee cantonments for the services of the one vaccinator in the two cantonments.

NATIVE PHYSICIANS.

[Rav Saheb Vishram Ramji Ghole, Assistant Surgeon, Poona.] The native physicians of Poona may be divided into two classes. The first class includes those who have studied the native medical sciences from the Sanskrit works on the subject. The second class includes all quacks who pretend to medical skill which they do not possess. The persons of both classes are indiscriminately called Vaidyas. The scientific practitioners hold a good position in society, are much respected, and all honor due to great learning is paid to them. Their advice is much sought after and valued and they derive a good income. Those holding the best position, on an average, realize about £20 (Rs. 200) a month. The medicines they use are generally prepared by themselves, with the exception of decoctions of herbs and other easily made concoctions, which are left to the patients or their friends to prepare, the Vaidyas giving the necessary directions. The system of remuneration is either by a small fee for each visit, a fixed annuity, or a bargain is struck for the cure of a certain disease, the moiety being paid down and the balance remaining to be paid on the recovery of the patient, and the *Vaidyas* supplying the medicine without extra charge. The quacks as a rule occupy an acknowledged inferior position in society, their advice is not much valued, their practice is limited, and they are generally poor. Most of them are herbalists and some aspire to the position of specialists for the cure of certain diseases only.

There is another class of persons called *Vaidus* who may be grouped with the quacks. These men are from Talegaon Dabhade, form a distinct race, and appear to be the aboriginal practitioners, and have an obscure history. There are about a hundred families of these men living about Ganesh Khind who come daily into Poona to sell their herbs and medicaments. They are found scattered over every part of the district during the fair weather, returning to their homes in the rainy season. Their remedies consist mostly of herbs and a few metallic compounds and reduced metals. They generally practise their art among the ignorant classes of people. The diseases which they principally pretend to treat are gonorrhoea, rheumatism, syphilis, ulcers, fevers, abscesses, impotence, and sterility. Their surgical knowledge is limited to the opening of abscesses and extracting guineaworm, in which latter complaint they display considerable skill. Their pretensions are great, and they have special remedies for every ailment.

There are some *Hakims* or Musalman physicians in the city. Their condition and customs are similar to those of the *Vaidyas*. They derive their education from Persian medical works.

The number of scientific practitioners is small and they are gradually disappearing owing to the natural neglect of native medicine. There are now (1882) twenty-four Vaidyas and three *Hakims* practising in the city of Poona, but of the quacks who daily parade the virtues of their nostrums in the streets there is no count, the scientific practitioners or Vaidyas are all Brahmans by caste. The larger number of the quacks are Brahmans, a few being Sonars, Marathas, and others. The *Vaidus* are a distinct race or caste by themselves. The native practitioners' forte lies in medicine; their surgical practice has not been studied to the same extent, as the Sanskrit treatises on that subject are very imperfect. Their doctrines are based on humoral pathology. They state there are three chief humors in the body, choler or bile, phlegm, and wind, and a disorder or vitiation of any of them constitutes a disease. The *Hakims* occasionally undertake surgical cases, couch cataracts, extract stone from the bladder, and attempt rhinoplastic operations. The *Vaidyas* and Hakims make use of reduced metals or ashes of metals, metallic compounds which are prepared by themselves, and vegetable roots, barks, seeds, and oils. Many of the Vaidyas and Hakims have commenced to use English medicines, which they disguise to deceive their patients. The position and emoluments of these practitioners in large cities, where native graduates, apothecaries, and hospital assistants practise, have lately suffered much. But even in the city of Poona some of the *Vaidyas* are extensively consulted and sought after even by the best educated natives.

CAT PLAGUE.

In 1883 a curious epidemic occurred among the cats at Sirur. From the 1st to the 21st of June 1883, 125 cats died. The chief symptom noticed was vomiting. Cholera was prevalent at Sirur at the time. The disease among cats had, as far as could be ascertained by the medical officer Surgeon Stewart, never appeared before at the place. On the 19th of May 1883 cholera broke out at Sirur, and about the 1st of June cats died at the rate of twelve a day. Cholera ceased on the 22nd of June and the worst part of the cat epidemic was over by the 18th of the same month, although the disease continued to prevail among the animals to a slight extent for two or three weeks afterwards. Altogether about 300 cats died during the epidemic, that is fifty per cent of the total number of cats in the town. Out of nine cats examined which died of the disease, eight gave evidence of symptoms resembling each other. The ninth cat suffered from by far the most severe type of the disease. The cat first became restless, not sitting for any length of time in any one place but shifting about. As it walked it staggered in its gait. Some of the cats cried very loudly and incessantly as if in great pain. All food and drink were refused from the commencement of the illness till death took place. In one case brought to Surgeon Stewart's knowledge a cat recovered after three days' illness. Great salivation and foaming at the mouth were invariably present. The matter vomited was usually yellow, but sometimes green, and in one case it was observed to be white. Throughout the illness there was no diarrhoea. All the people who handled the cats said that there was great heat and fever. As the disease progressed, the features of the animals became pinched and

shrunken and the eyes sunk in the head. This was a marked feature of the disease. The state of the conjunctivae was noticed by one man and he said that he saw a yellow tinge. Gradually the cats either assumed a comatose or lethargic condition, or else attacks of convulsions set in; and after a time, varying from ten to thirty-six hours death occurred, the cat either dying quietly or during an attack of convulsions. No cases of cholera had occurred in the houses where the nine cats were examined, but in several instances such cases bad occurred within a few yards of the neighbourhood. The owners of two out of the nine cats said that the animals changed colour, one of them which was white becoming somewhat darker, and some of the hair of the other which was of a brindled sandy colour becoming white. [A similar plague occurred at Ahmadnagar in 1881. Here also cholera prevailed from about the beginning of July till the middle of August. During the first part of this period a great mortality occurred among the cats of the city. About 750. cats died from the first to the 25th of July 1881. The symptoms of the disease were almost the same. A day or two before the cat died it appeared inactive, took no food, and tried to find some cool place where it could rest. The throat of the animal became swollen and choked and when it died it foamed at the mouth]

In the second or severe type of the disease, a cat, which was a very strong black animal and was well when it was let out of the house at six o'clock in the morning, died within six hours. It showed signs of illness shortly after re-entering the house and vomited at least twenty times, the vomit being black like coffee grounds. A thick slime ran from the animal's month and it had two white watery stools. The eyes were so sunken that it was only with difficulty that they could be seen when open. The animal was extremely restless, moving about from place to place. It refused all food and drink, cried a little during the first hour of its illness but not afterwards, was not lame from cramps when it walked, but staggered in its gait and seemed quite stupid. It had no convulsions and died quite peaceably. The cat was said to be colder than was natural during illness, and after death it became very rapidly cold. The colour changed from black to rusty brown, and so great was the change that the owner recognised it with difficulty.

On the whole, the disease from which the animals suffered was in Surgeon Stewart's opinion a malignant epidemic disease of the most virulent type, resembling cholera in some points, but in others much more resembling what one would expect to find in cases of yellow fever, a disease in which acute atrophy of the liver forms one of the leading features. Charbonous fever without eruption is the only disease known to veterinary science closely resembling the one described above. This affection differs widely from cholera in many of its symptoms.

A very similar disease attacked some of the cattle at Sirur, principally young healthy buffaloes. Of nineteen buffaloes and five cows owned by three individuals examined by Surgeon Stewart, ten buffaloes and one cow were attacked with the disease and died. Six of the animals were attacked between the 18th and the 21st of July, three on the 23rd, the 28th, and the 29th of July, and two on the 2nd and the 7th of August 1883. All were young and healthy animals, only one being of medium age. Death occurred within fourteen to eighteen hours. The symptoms were panting, salivation, running from the

nose and mouth, restlessness in some cases, and rapid death. [Memorandum on the 'Catplague' at Ahmadnagar in 1881 and at Sirur in 1883.]

BIRTHS AND DEATHS.

The total number of deaths shown in the Sanitary Commissioner's yearly reports for the eighteen years ending 1883 is 321,918 or an average mortality of 17,884, that is, according to the 1881 census, of about twenty in every thousand people. Of the average number of deaths 11,297 or 63.2 per cent were returned as due to fevers, 1485 or 8.3 per cent to cholera, 1434 or 8.0 per cent to bowel complaints, 580 or 3.2 per cent to smallpox, and 2816 or 15.8 per cent to miscellaneous causes. Deaths from violence or injuries averaged 270 or 1.5 per cent of the average mortality. An examination of the death returns shows that fever which during the eighteen years ending 1883 caused an average yearly mortality of 11,297 or 63.2 per cent was below the average in the six years ending 1871 and in 1874,1879, and 1880, and was above the average in 1872,1873, in the four years ending 1878, and in the three years ending 1883. The five years ending 1870 had less than 8000 deaths from fever, the lowest total being 5545 in 1867; the two years 1866 and 1869 had between 6000 and 7000 deaths; 1870 had between 7000 and 8000 deaths. The three years ending 1873, 1875, 1876, and the four years ending 1883 had between 10,000 and 15,000 deaths, and the two years ending 1878 had between 15,000 and 21,000 deaths. Of the deaths from cholera which amounted to 26,736 and averaged 1485, 5279 or 19.7 per cent happened in 1883, 4646 or 17.4 per cent happened in 1875, 3673 or 138 per cent in 1877, 3613 or 13.5 per cent in 1872, 3601 or 13.5 per cent in 1878, and 1706 or 636 per cent in 1869. Of the twelve years below the average, 1881 had 1412 deaths, 1876 had 719 deaths, 1868 had 686 deaths, 1880 had 461 deaths, and 1870 1871 and 1882 had between 200 and 300 deaths; 1879 had 100 deaths; and 1866 had 161 deaths. Of the remaining three years 1873 was free from cholera and 1867 and 1874 had less than ten deaths. Of the deaths from small-pox which amounted to 10,447 and averaged 580, 2121 or 20.3 per cent happened in 1872, 1599 or 15.3 per cent in 1868, 1312 or 125 per cent in 1877, 1225 or 11.7 per cent in 1883, and 1000 or 96 per cent in 1867. Besides these years one year 1876 with 886 deaths had a more than average mortality from smallpox. Of the years below the average 1871 and 1882 had between 560 and 500 deaths, 1869 and 1873 had between 300 and 400; 1866, 1874, and 1875 had between 100 and 200; 1870 had ninety-one deaths; 1878 and 1879 had less than fifty deaths; and the remaining two years 1880 and 1881 were free from small-pox. Deaths from bowel complaints which amounted to 25,820 and averaged 1434, varied from 706 in 1866 to 2270 in 1877. Injuries with a total mortality of 4867 and an average mortality of 270 varied from 177 in 1869 to 340 in 1878. Other causes with a total mortality of 50,695 and an average mortality of 2816 varied from 1625 in 1879 to 4808 in 1872. During the thirteen years ending 1883 for which birth returns are available, the number of births was returned at 243,078, the yearly total varying from 11. 40 in 1878 to 25,705 in 1883 and averaging 18,698, or according to the 1881 census about twenty-one in every thousand people. The details are given overleaf:

[The death returns are believed to be fairly correct and the birth returns to be incomplete.]

| | DEATHS. | | | | | | | | | | |
|---------|----------|-----------|---------|----------------------|-----------|------------------|---------|---------|--|--|--|
| YEAR. | Cholera. | Smallpox. | Fevers. | Bowel Complaints. | Injuries. | Other Causes. | Total. | BIRTHS. | | | |
| 1866 | 161 | 117 | 6547 | 706 | 205 | 1994 | 9730 | | | | |
| 1867 | 9 | 1000 | 5545 | 855 | 191 | 2077 | 9677 | | | | |
| 1868 | 686 | 1599 | 5626 | 919 | 217 | 2304 | 11,351 | | | | |
| 1869 | 1706 | 357 | 6303 | 1084 | 177 | 2619 | 12,246 | | | | |
| 1870 | 214 | 91 | 7542 | 1270 | 199 | 2997 | 12,313 | | | | |
| 1871 | 243 | 552 | 10,791 | 1859 | 304 | 3879 | 17,628 | 15,172 | | | |
| 1872 | 3613 | 2121 | 14,137 | 2103 | 249 | 4808 | 17,031 | 16,461 | | | |
| 1873 | | 302 | 11,418 | 1646 | 284 | 3481 | 17,131 | 18,441 | | | |
| 1874 | 2 | 129 | 9731 | 1363 | 284 | 2830 | 14339 | 19,906 | | | |
| 1875 | 4646 | 186 | 12,018 | 1866 | 268 | 2943 | 21,927 | 21.214 | | | |
| 1876 | 719 | 886 | 13,342 | 1764 | 327 | 2803 | 19,841 | 19,617 | | | |
| 1877 | 3673 | 1312 | 19,753 | 2270 | 330 | 3481 | 30,819 | 15,152 | | | |
| 1878 | 3601 | 40 | 20,612 | 1769 | 340 | 3245 | 29,607 | 11,740 | | | |
| 1879 | 100 | 24 | 9599 | 937 | 308 | 1625 | 12,593 | 15,139 | | | |
| 1880 | 461 | | 10,522 | 976 | 297 | 1838 | 14,094 | 18,199 | | | |
| 1881 | 1412 | | 13,967 | 1463 | 330 | 2585 | 19,757 | 21,578 | | | |
| 1882 | 211 | 506 | 11,420 | 1345 | 266 | 2323 | 16,071 | 24,754 | | | |
| 1883 | 5279 | 1225 | 14,480 | 1625 | 291 | 2863 | 25,763 | 25,705 | | | |
| Total | 26,736 | 10,447 | 203,353 | 25,820 | 4867 | 50,695 | 321,918 | 243,078 | | | |
| Average | 1485 | 580 | 11,297 | 1434 | 270 | 2816 | 17,884 | 18,698 | | | |



SUB-DIVISIONS

[From materials supplied by Mr. P. C. H. Snow, C. S. and Mr. W. M. Fletcher, Survey Superintendent.]

BHIMTHADI.

Boundaries.

Bhimthadi, or Bhima Bank, is one of the eastern subdivisions, and has its head-quarters at Supa. It lies on the right bank of the Bhima between 18° 2' and 18° 40 north latitude and 74° 13' and 74° 55' east longitude, and is bounded on the north by Sirur and the Shrigonda sub-division of Ahmadnagar, both separated from it by the Bhima; on the east by the Karjat sub-division of Ahmadnagar and the Karmala sub-division of Sholapur both separated from it by the Bhima and by Indapur; on the south by the Phaltan State separated from it by the Nira; and on the west by Purandhar and Haveli. Its area is 1036 square miles, its 1881 population 110,428 or 107 to the square mile, and its 1881-82 land revenue £22,935 (Rs. 2,29,350).

Area.

Of an area of 1035 square miles 1032 have been surveyed in *detail*. Of these 99 are the lands of alienated villages. The rest, according to the revenue survey returns, contains 495,517 acres or 82 per cent of arable land; 316 acres or .05 per cent of unarable land, 20,065 acres or 3 per cent of grass; 20,837 acres or 3 per cent of forest reserves; and (10,688 acres or 10 per cent of village sites, roads, river beds, and hills. From the 495,517 acres of arable land, 46,007 acres or 9 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 449,510 acres, the actual area of arable Government land, 405,624 acres or 90 per cent were under tillage in 1880-81. Of these 392,577 or 97 per cent were dry-crop and 13,047 acres or 3 per cent were watered garden land.

Aspect.

A spur of the Sahyadris enters the sub-division from the west and quickly widening fills nearly the whole breadth before it reaches the eastern border. The only hill of note is that occupied by the ancient temple of Bhuleshvar. The north along the Bhima and the Mula-Mutha is generally level but is very bare of trees. The north-east is rough and hilly, as also are the villages bordering on the Bhuleshvar range to the east of Patas. There are almost no mango groves, but the grass lands along the Bhima have some good *babhuls*, and some *babhuls*, *limbs*, and *pimpals* fringe the sides of streams and shade the neighbourhood of wells. The Bhuleshvar hills in the centre are bare, and the whole country is exceedingly bleak. In the south the land slopes southwards, a waving plain watered and broken by the Karha and other smaller streams.

The flat hill tops have usually a surface of shallow black soil strewn with stones. The slopes and skirts of the hills are generally of shallow light soil, while black soil of considerable depth is found in the river basins Many villages near the Bhima and Nira have much deep rich black soil. The chief crops are *bajri*, *jvari*, *math*, grain, wheat, and *kulthi*, besides a little sugarcane, cotton, tobacco, linseed, and vegetables. The staple grains are *jvari* in the east and *bajri* in the west.

Water.

The, Mula-Mutha and Bhima form the northern, and the Nira the southern boundary; and the Karha a smaller stream, crossing the sub-division falls into the Nira in its south-east corner. Many smaller streams like the Karha are dry during the hot weather. Besides the Mutha canals which water a considerable area there are large reservoirs at Kasurde, Matoba, Shirsuphal, Patas, and Supa.

Wells.

Near the Bhima water lies so deep that villages along its bank have never had wells. In the whole sub-division besides 675 wells used for drinking, about 2766 wells are used for watering the land. Of the whole number about 874 are with and 2567 without steps. A well waters from one to three acres and the depth of water varies from one to twenty-two feet. The cost of building a well varies from £20 to £200 (Rs. 200 - 2000).

Climate.

The climate which is dry and airy varies in different parts. The north-west enjoys in general a good rainfall, while in the northeast, as in Indapur, the supply is scanty and uncertain. The difference begins from the Bhuleshvar hills to the east of Patas. Along the Bhima in the north the certain rainfall makes irrigation less necessary than in other parts. The southern half though part of it is nearer the Sahyadris has, like the north-east, an uncertain supply of rain due apparently to the clouds being drawn to the Purandhar and Mahadev hills.

Stock.

According to the 1882-83 returns, farm stock included fifty-nine riding and 2575 load carts, 525 two-bullock and 3434 four-bullock ploughs, 36,596 bullocks and 18,518 cows, 866 he-buffaloes and 2712 she-buffaloes, 2547 horses, 83,786 sheep and goats, and 1015 asses.

Crops.

In 1881 -82, of 403,112 acres, the whole area held for tillage, 34,898 acres or 8.65 per cent were fallow or under grass. Of the remaining 368,214 acres, 4942 were twice cropped. Of the 373,156 acres under tillage, grain crops occupied 318,258 acres or 85.28 per cent, of which 226,152 were under Indian millet *jvari* Sorghum vulgare; 82,159 under spiked millet *bajri* Penicillaria spicata; 8688 under wheat *gahu* Triticum aestivum; 720 under maize *makka* Zea mays; 136 under *rala* or *kang* Panicum italicum; 51 under barley *jav* Hordeum hexastichon; 33 under rice *bhat* Oryza sativa; and 319 under other grains of which details are not given. Pulses occupied 17,017 acres or 4.56 per cent, of which 6698 were under gram *harbhara* Cicer arietinum; 2934 under *kulith* or *kulthi* Dolichoa biflorus; 1576 under *tvr* Cajanus indicus; 351 under *mug* Phaseolus mungo; and 5458 under other pulses. Oilseeds occupied 34,607 acres or 927 per cent, of which 354 were under gingelly seed *til* Sesamum indicum; 70 under linseed *alshi* Linum usitatissimum; and 34,183 under other oilseeds. Fibres occupied 659 acres or 0.17 per cent, all of them

under Bombay hemp *san or tag* Crotalaria juncea. Miscellaneous crops occupied 2615 acres or 0.70 per cent, of which 724 were under chillies *mirchi* Capsicum frutescens; 311 under sugarcane *us* Saccharum officinaruin; 181 under tobacco *tambakhu* Nicotiana tabacum; and the remaining 1399 under various vegetables and fruits.

People.

The 1881 population returns show, of 110,428 people 106,733 or 96.65 per cent Hindus; 3569 or 3.23 per cent Musalmans; 115 or 0.10 per cent Christians; 7 Jews; and 4 Parsis. The details of the Hindu castes are: 3338 Brahmans; 28 Kayasth Prabhus, writers; 1158 Marwar Vanis, 765 Lingayats, 678 Gujarat Vanis, 71 Komtis, and 71 Vaishya Vanis, traders; 42,922 Kunbis, 8130 Malis, and 4 Kachis, husbandmen; 2954 Chambhars, leather-workers; 1026 Sonars, goldsmiths; 1026 Telis, oilmen; 976 Kumbhars, potters; 878 Badhais, carpenters; 641 Shimpis, tailors; 578 Lohars, blacksmiths; 531 Koshtis, weavers; 402 Kasars, glassbangle-hawkers; 327 Sangars, weavers; 290 Lonaris, limeburners; 167 Patharvats, stone-masons; 82 Salis, weavers; 40 Bhaysars, dyers; 35 Buruds, bamboo-workers; 33 Hauls, weavers; 20 Jingars, painters; 19 Beldars, quarrymen; 12 Gaundis, masons; 9 Tambats, coppersmiths; 5 Nilaris, dyers; 5 Ghisadis, polishers; 5 Otaris, casters; one Khatri, weaver; one Bhadbhunja, grain-parcher; 683 Guravs, templeservants; 45 Ghadshis, musicians; 1412 Nhavis, barbers; 750 Parits, washermen; 13,770 Dhangars, cowmen; 128 Gavlis, cowkeepers; 1035 Kolis and 379 Bhois, fishers; 246 Rajputs, messengers; 34 Kamathis, house-builders; 5 Bhandaris, palm-tappers; 3 Kalals, distillers; 3 Lodhis, labourers; one Raddi, waterman; 4490 Ramoshis, watchmen; 1089 Vadars, stone-cutters; 370 Vanjaris, grain-dealers; 216 Kaikadis, labourers; and 120 Thakurs, husbandmen; 9730 Mhars, village servants; 2974 Mangs, messengers; 73 Dhors, tanners; 26 Halalkhors, scavengers; and 518 Gosavis, 397 Joshis, 255 Holars, 215 Kolhatis, 142 Bharadis, 107 Kanphatas, 91 Jangams, 57 Vaidus, 50 Gondhlis, 28 Bhamtas, 19 Tirmalis, 13 Chitrakathis, 10 Aradhis, 9 Vasudevs, 7 Bhats, and 5 Manbhavs, beggars.

Cultivators.

About eighty-six per cent of the cultivators are Kunbis, nine per cent Brahmans, Lingayat Vanis, and Dhangars, four per cent Mhars and Mangs, and one per cent Musalmans. The houses of most husbandmen have walls of hardened earth occasionally mixed with stone. The roofs are either flat made of wood and hardened mud or sloping with tiles and reed thatch. Some rich landholders of Supa and Baramati have better and roomier houses than those in other parts of the sub-division. Nearly fifty per cent of the landholders have to borrow bullocks to till their holdings, as they seldom have more than one pair of their own. Rich landholders have one to six pairs of bullocks and also have she-buffaloes, goats, and sheep. About seventy per cent have not more than enough grain to keep themselves and their families, and the poor have to eke out their profits by labour. About sixty per cent are small landowners, thirty per cent labourers, and ten per cent proprietors with tenants. The Kunbis do a substantial business during the slack season in carting, either themselves working for hire or letting their carts and bullocks.

Communications.

The Poona-Sholapur road passes throughout the length of the sub-division, and the Peninsula Railway also crosses it in the same direction, the two running parallel to and at a very short distance from each other through the western half, while the eastern half is opened by the railway in the north and the Poona high road in the centre. Three railway stations, Dhond Patas and Kedgaon, are within the Bhimthadi limits, and two Diksal and Uruli are close to its borders. Besides these, main lines of road lead from the station at Kedgaon to Sirur through Prirgaon and to Supa and Jejuri through Padvi. The market towns are Patas, Karkamb, and Yavat on the high road from Poona to Sholapur.and Baramati,Supa, Jejuri, Sasvad, Phaltan, Wai,Bhor and Satara are all within reach of the sub-division, The people are almost entirely occupied in husbandry, and gram and other products are sent to Poona and to a less extent to Bombay.

HAVELI.

Boundaries.

Haveli, the most southerly of the Sahyadri sub-divisions, with its head-quarters at Poona, and lying between 18° 17' and 18° 45' north latitude and 73° 24'and 74° 16' east longitude, is bounded on the north by Khed and Sirur; on the east by Bhimthadi; on the south by Purandhar and Bhor; and on the west by Pen in Kolaba and Bhor in Satara. Its area is 813 square miles, its 1881 population 287,062 or 353 to the square mile, and its 1881-82 land revenue £20,494 (Rs. 2,04,940).

Area.

Of an area of 813 square miles 795 have been surveyed in detail, Of these 202 are the lands of alienated villages. The rest, according to the revenue survey returns, contains 265,329 acres or 69 per cent of arable land; 11,075 acres or 2 per cent of unarable land; 23,089 acres or 6 per cent of grass; 30,336 acres or 7 per cent of forest reserves; and 49,910 acres or 13 per cent of village sites, roads, river beds, and hills. From the 265,329 acres of arable land, 34,688 acres or 13 per cent have to be taken on account of alienated land in Government villages. Of the balance of 230,641 acres the actual area of arable Government land 226,841 acres or 98 per cent were under tillage in 1880-81. Of these 212,044 acres or 93 per cent were dry-crop and 14,797 acres or 7 per cent were watered garden land.

Aspect.

A. spur from the Sahyadris, of which the hill fort of Sinhgad in the west is the most conspicuous feature, runs along the southern boundary of the sub-division. To the east of Poona in the centre the country is flat, open, and almost bare of trees; to the west it is rugged and hilly and much of it well wooded especially along the south side of the Mutha where are large numbers of fine mango trees and a sprinkling of jack trees. Teak also appears on the sides of the Sinhgad hills but never grows to any size. The Mula-Mutha

running east divides the country to the east of Poona into two nearly equal portions. The tract to the north of the Mula-Mutha, between it and the Bhima, comprising some of the poorer villages, is chiefly stony, barren, high-lying land, better fitted for sheep-grazing than tillage. The people make the most of their barren inheritance, every available gorge being blocked with rough stone embankments, to gather and keep the scanty soil which is washed from uplands. The country to the south between the Mutha and the hills is much more level and has a large proportion of rich soil. Even under the hills the villages are not unfruitful, a better rainfall making up for a somewhat poorer soil.

The flat-topped hills and terraces have usually a shallow surface of black soil strewn with stones. The slopes and skirts of the hills are shallow red and gray or mere stones and rock, and the river and stream basins are a rich deep black.

The neighbourhood of the great market of Poona makes the tillage of Haveli more energetic and careful than in most other parts of the district. The chief crops are bajri, ivari, rice, nagli, hulga, wheat, gram, tur, khurasni, udid, mug, til, bhuimug, castor-seed, sugarcane, and chillies. Near Poona those crops are chiefly grown which are suited to meet the daily demands of a large city. Green fodder in a great measure supersedes grain and is supplied by early *jvari* and maize. In garden lands especially for some miles around Poona, oranges, limes, pomaloes, guavas, plantains, figs, pomegranates, grapes, mangoes, and vegetables of all kinds, both local and foreign, are grown in large quantities. Lucern grass is a much-grown and profitable crop. Pannalas or betel vine gardens are numerous especially in the villages of Kondve Budruk, Kondve Khurd, Nudri, Muhammadvadi, and Phursangi. To the west of Poona early or *kharif* crops predominate, the chief being early jvari and bajri supplemented by tur, til, nachni, and wheat. Rice is also grown in a few border villages notably in Rahatanda, Arvi, Marunji, Kasarsai, Mulkhed, and Bhukan. These western villages have little garden land, probably because the rainfall is certain enough to ensure a regular return from dry-crop tillage. They have also much land under grass which from the plentiful rainfall grows freely and in Poona finds a ready sale. The area of arable land kept for private grazing is no less than 13.45 per cent of the whole occupied area. Vagholi, Kharadi, Vadgaon, Sheri, Kesnand, and Lohogaon from their nearness to Poona, have large tracts under grass which probably pay better than they would if under tillage. Long strings of men and women daily bring in bundles of grass, firewood, cowdung-cakes, and milk to the camp and city of Poona.

Water.

The sub-division is well watered. Besides the smaller streams it is crossed by five considerable rivers, the Bhima and the Indrayani which form its northern boundary, the Pauna rising in the Nane-Maval and falling into the Mula near Dapuri, and the Mula and the Mutha, which, with their sources in the Sahyadris join below the city of Poona and flow east to the Bhima. The Indrayani, which also has its source in the Sahyadris, after crossing Maval flows into the Bhima at Tolapur, from which for a short distance the Bhima forms the boundary of Haveli. All of these rivers throughout the hot months hold water in considerable pools, if not in small streams. The Mutha canal scheme, including

Lake Fife and the Pashan reservoir are the chief sources of crop water. Except these two water works the streams seldom supply water channels throughout the year, and are useful in raising only such crops as can be cleared before the hot weather begins in March. The Katraj lake in the Sinhgad hills about fifteen miles south of Poona was built by Balaji Bajirav the third Peshwa (1740-1761), to supply the city of Poona with drinking water. The canal still carries a small quantity of water into the city.

Wells.

Besides 99 wells used for drinking, about 1722 wells are used for watering the land. Of the whole number about 599 are with and 1222 without steps. A well waters from two to four acres and the depth of water varies from four to twenty feet. The cost of building a well varies from £20 to £200 (Rs. 200 - 2000).

Climate.

The climate which is dry and healthy varies much in different parts of the sub-division; the rainfall increases so rapidly towards the west that in the border villages rice and *nagli* take the place of *jvari* and *bajri*. Mulshi in the west has an average fall of forty-seven inches, compared with twenty-five inches at Poona in the centre.

Crops.

In 1881-82, of 226,743 acres, the whole area held for tillage, 21,306 acres or 9.39 per cent were fallow or under grass. Of the remaining 205,437 acres, 1803 were twice cropped. Of the 207,240 acres under tillage, grain crops occupied 185,994 acre3 or 8974 per cent of which 81,283 were under spiked millet bajri Penicillaria spicata; 54,877 under Indian millet *jvari* Sorghum vulgare; 21,104 under rice *bhat* Oryza sativa; 12,572 under rdgi or nachni Eleusine corocana; 8288 under sava and vari Panicum miliaceum and miliare; 3503 under wheat gahu Triticum aestivum; 113 under rala or hang Panicum italicum; 50 under barley jav Hordeum hexastichon; 50 under maize makka Zea mays; and 4154 under other grains of which details are not given. Pulses occupied 2841 acres or 1.37 per cent, of which 1404 were under gram harbhara Cicer arietinum; 589 under tur Cajanus indicus; 226 under mug Phaseolus inungo; 110 under kulith or kulthi Dolichos biflorus; 100 under peas vatana Pisum sativum; 47 under udid Phaseolus radiatus; and 365 under other pulses. Oil-seeds occupied 11,148 acres or 537 per cent, of which 4392 were under gingelly seed til Sesamum indicum, and 6756 under other oil-seeds. Fibres occupied 2362 acres or 1.13 per cent. Miscellaneous crops occupied 4895 acres or 2.36 per cent, of which 2260 were under sugarcane us Saccharum officinarum; 221 under chillies *mirchi* Capsicum frutescens; and the remaining 2414 under various vegetables and fruits.

Stock.

According to the 1882-83 returns farm stock included 962 riding and 5110 load carts, 4508 two-bullock and 4359 four-bullock ploughs, 34,046 bullocks and 25,229 cows,

1556 he-buffaloes and 8763 she-buffaloes, 2176 horses, 21,169 sheep and goats, and 2140 asses.

People.

The 1881 population returns show, of 287,062 people 256,056 or 8919 per cent Hindus; 20,503 or 7.13 per cen Musalmans; 8372 or 2.91 per cent Christians; 1491 or 0.5: per cent Parsis; 560 or 0.19 per cent Jews; 77 Buddhists and 3 Unitarians. The details of the Hindu castes are: 23,976 Brahmans; 554 Kayasth Prabhus, 398 Velalis, 171 Patane Prabhus, and 30 Dhruv Prabhus, writers; 3458 Mar war Vanis, 2189 Linga-yats, 1542 Gujarat Vanis, 351 Vaishya Vanis, 236 Kirads, 156 Korntis, 95 Agarvals, 67 Bhatyas, 63 Brahma-Kshatris, 49 Tambolis, 33 Bangars, and 6 Lohanas, traders and merchants; 117,830 Kun-bis, 13,502 Malis, 649 Kachis, 64 Baris, and 10 Pahadis, husband-men; 5496 Chambhars, leather-workers; 5256 Shimpis, tailors; 3878 Sonars, goldsmiths; 2776 Badhais, carpenters; 2496 Telis, oilmen; 2338 Kumbhars, potters; 1200 Salis, weavers; 1121 Kasars, glassbangle-hawkers; 864 Tambats, coppersmiths; 511 Jingars, painters; 504 Buruds, bamboo-workers; 487 Koshtis, weavers; 408 Lohars, blacksmiths; 381 Ghisadis, polishers; 381 Khatris, weavers; 357 Beldars, quarrymen; 344 Lonaris, limeburners; 256 Gaundis, masons; 252 Patharvats, stone-masons; 275 Hauls, weavers; 245 Sangars, weavers; 198 Bhadbhunjas, grain-parchers; 98 Nilaris, dyers; 86 Saltankars, tanners; 79 Lakheris, lac bracelet-makers; 66 Halvais, sweetmeat-sellers; 59 Otaris, casters; 53 Kacharia, glassbangle-makers; 32 Bhavsars, dyers; 21 Kataris, turners; 20 Jharekaris, dust-washers; 931 Guravs, temple-servants; 27 Ghadshis, musicians; 3408 Nhavis, barbers; 2556 Parits, washermen; 4256 Dhangars, cowmen; 1757 Gavlis, cowkeepers; 2322 Kolis and 1907 Bhois, fishers; 2328 Rajputs, messengers; 1053 Kamathis, house-builders; 361 Lodhis, labourers; 180 Chhapar-bands, thatchers; 108 Bhandaris, palm-tappers; 62 Kalals, distillers; 29 Raddis, watermen; 3766 Ramoshis, watchmen; 679 Van-jaris, grain-dealers; 470 Kaikadis, labourers; 397 Vadars, stonecutters; 346 Kathkaris, catechu-makers; 243 Thakurs, husbandmen; 81 Bhils, labourers; 30 Phasepardhis and 5 Berads, hunters; 23,554 Mhars, village-servants; 4303 Mangs, messengers; 878 Halalkhors, scavengers; 392 Dhors, tanners; 1449 Gosavis, 465 Jangatns, 444 Joshis, 357 Vaidus, 257 Bharadis, 199 Gondhlis, 93 Kolhatis, 77 Panguls, 74 Joharis, 65 Holars, 50 Bhats, 38 Bhamtas, 21 Manbhays, 20 Kanphatas, 15 Ar&dhis, 14 Chitrakathis, 12 Bhutas, and 10 Tirmalis, beggars.

Communication

Except in some of the villages to the north-west of Poona where the country is too rugged for carts means of communication abound in the subdivision. The Peninsula railway runs through its centre having five stations within its limits. The high roads are numerous and good, the chief being those to Bombay, Ahmadnagar, Sholapur, and Satara. To Satara there are three routes by the Katraj, Babdev, and Diva passes, all skilful lasting works, the top of the Katraj hill being pierced by a tunnel of considerable length. Many miles of excellent made roads cross the cantonment of Poona and connect it with Kirkee and the city. A second class road runs also through Narayangaon to Junnar and Nasik. All these roads centre in Poona and give easy access from all parts of the district to the vast

quantity of supplies required by so large a city. The villages in the Mutha valley have a good road from the foot of Sinhgad; and the new road to Bhor joins Bhukum, Bavdhan, and other places with the city while most of the villages along the Mula are at no great distance from the old Bombay road. In the north-west of the sab-division a new road has been made from Poona to Paud.

INDAPUR.

Boundaries.

Inda'pur, the most south-easterly sub-division, lying between 7° 54' and 18° 20' north latitude are and 74° 44' and 75° 14' east longitude, is bounded on the north by Bhimthadi and by the Karmala sub-division of Sholapur, which, separated by the Bhima, also forms its eastern boundary; on the south by the Malsiras sub-division of Sholapur and the Phaltan state territory, both separated from it by the Nira; and on the west by Bhimthadi. Its area is 566 square miles, its 1881 population 48,114 or 85 to the square mile, and its 1881-82 land revenue £10,200 (Rs. 1,02,000).

Area.

Of an area of 566.6 square miles 353,570 acres have been surveyed in detail. Of these 9366 acres are the lands of alienated villages. The rest according to the revenue survey returns contains 291,828 acres or 85 per cent of arable land; 21,268 acres or 6.1 per cent of unarable land; 18,467 acres or 53 per cent of grass; 493 acres or 01 per cent of forest reserves; and 12,144 acres or 3.5 per cent of village sites, roads, river beds, and hills. From the 291,828 acres of arable land, 14,547 acres or 4.9 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 277,280 acres, the actual area of arable Government land 206,999 acres or 74.6 per cent were under tillage in 1880-81. Of these 199,929 acres or 97 per cent were dry-crop and 7069 acres or 3 per cent were watered garden land.

Aspect.

The sub-division is hilly and rugged in the north-west and centre, but towards the rivers on its borders it is open and smooth. In all the higher lands the soils are shallow and stony. Good black soil is found on plateaus, but of no extent or depth except along the banks of the Nira and Bhima. A yellow alluvial soil called *dheli* is also found in small quantities along these streams. A small area of land close to the banks of the Bhima is yearly flooded and enriched by the rainy weather freshes and its tillage to some extent made independent of the local rainfall. Though a little *bajris* grown the staple crop is *jvari*.

Water.

The river Bhima bounds Indapur from its north-west to its south-east corner where it is joined by the river Nira, which forms the southern boundary. Besides the Nira canal which commands a large area there are large reservoirs at Indapur and Bhadalvadi.

In a drought-stricken tract like Indapur, before any large waterworks were constructed, its wells were of the greatest importance. In past years the little spots round wells were the only parts of the district that yielded any return. The Nira canal supplies water enough even for late crops and during the cold months instead of Indapur being parched and barren, large tracts are covered with valuable crops. Besides by direct watering, the supplies brought by the Nira canal have improved Indapur by soaking into the soil. Wells that were dry before the canal was opened have now a good supply; and streams which ceased to flow early in the dry season now flow nearly throughout the year.

Well.

Besides 409 wells used for drinking, about 1185 wells are used for watering the land. Of the whole number about 359 are with and 1235 without steps. A well waters from one to twelve acres and the depth of water varies from five to thirty feet. The cost of building a well varies from £20 to £200 (Rs. 200 - 2000).

Climate.

As regards rainfall, Indapur is one of the worst placed sub-divisions in the Deccan. In parts seasonable rain seems unknown and when the rain is seasonable it is generally scanty and uncertain. Year after year lands are left unsown for want of moisture and those that are sown yield next to nothing. Failures of crops more or less general are the rule and a good, or even a fair harvest the exception. Apparently from its nearness to the Mahadev range in North Satara the fall is somewhat larger and more certain along the Bhima in the south-east corner of the sub-division than in the west from Kalas to the Baramati villages in Bhimthadi.

Stock.

According to the 1882 returns farm stock included twenty-five riding and 1213 load carts, 780 two-bullock and 1508 four-bullock ploughs, 17,514 bullocks and 8086 cows, 1061 he-buffaloes and 2095 she-buffaloes, 1253 horses, 53,153 sheep and goats, and 562 asses.

Crops.

In 1881-82, of 218,881 acres, the whole area held for tillage, 20,868 acres or 9.53 per cent were fallow or under grass. Of the remaining 198,013 acres, 1431 were twice cropped. Of the 199,444 acres under tillage, grain crops occupied 160,690 acres or 80.56 per cent, of which 129,069 were under Indian millet *jvari* Sorghum vulgare; 24,136 under spiked millet *bajri* Penicillaria spicata; 2983 under wheat *gahu* Triticum aestivum; 630 under maize *makka* Zea mays; 102 under rice *bhdt* Oryza sativa; 85 under *rala* or *kang* Panicum italicum; 14 under barley *jav* Hordeum hexastichon; and 3671 under other

grains of which details are not given. Pulses occupied 10,527 acres or 5.27 per cent, of which 5020 were under gram *harbhara C*icer arietinum; 645 under *kulith* or *kulthi* Dolichos biflorus; 356 under *tur* Cajanus indicus; 31 under *mug* Phaseolus mungo; 2 under peas *vatana* Pisum sativum; and 4473 under other pulses. Oilseeds occupied 23,039 acres or ll.55 per cent, of which 77 were under linseed *alshi* Linum usitatissimum; 14 under gingelly seed *til* Sesamum indicum; and 22,948 under other oil seeds. Fibres occupied 4703 acres or 2.35 per cent, of which 4565 were under cotton *kapus* Gossypium herbaceum; 94 under Bombay hemp *san* or *tag* Crotalaria juncea; and44 under other fibres. Miscellaneous crops occupied 485 acres or 0.24 per cent, of which 264 were under chillies *mirchi* Capsicum frutescens; 113 under sugarcane *us* Saccharum officinarum; 38 under tobacco *tambakhu* Nicotiana tabacum; and the remaining 70 under various vegetables and fruits.

People.

The 1881 population returns show, of 48,114 people 46,240 or 96.10 per cent Hindus; 1801 or 3.74 per cent Musalmans; 68 Christians; and 5 Parsis. The details of the Hindu castes are: 2046 Brahmans; 7 Kayasth Prabhus, writers; 652 Lingayats, 574 Marwar Vanis, 365 Gujarat Vanis, 145 Vaishya Vani's, and 25 Komtis, traders; 16,704 Kunbis and 3282 Malis, husbandmen; 1036 Chambhars, leather-workers; 460 Telis, oilmen; 391 Sonars, goldsmiths; 374 Kumbhars, potters; 374 Badhais, carpenters; 323 Lohars, blacksmiths; 237 Shimpis, tailors; 209 Koshtis, weavers; 118 Kasars, glassbanglehawkers; 81 Lonaris, lime-burners; 69 Sangars, weavers; 52 Gaundis, masons; 47 Beldars, quarrymen; 44 Buruds, bamboo-workers; 40 Bhavsars, dyers; 21 Tambats, coppersmiths; 19 Khatris, weavers; 18 Patharvats, stone-masons; 18 Salis, weavers; 12 Jingars, painters; 5 Kataris, turners; 4 Rauls, weavers; 268 Guravs, temple-servants; 25 Ghadshis, musicians; 625 Nhavis, barbers; 365 Parits, washermen; 7640 Dhangars, cowmen; 35 Gavlis, cowkeepers; 443 Kolis and 96 Bhois, fishers; 151 Rajputs, messengers; 1103 Vanjaris, grain-dealers; 1188 Ramoshis, watchmen; 251 Vadars, stonecutters; 124 Thakurs, husbandmen; 88 Kaikadis, labourers; 87 Berads and 64 Phasepardhis, hunters; 3442 Mhars, village-servants; 1782 Mangs, messengers; 26 Dhors, tanners; 260 Gosavis, 166 Holars, 98 Joshis, 52 Jangams, 39 Gondhlis, 33 Tirmalis, 16 Kolhatis, 7 Bhats, 6 Aradhis, 5 Joharis, and 3 Manbhays, beggars.

Cultivators.

Of about 20,000 husbandmen about seventy per cent are Kunbis, eight per cent Dhangars, eight per cent Malis, five per cent Marwari Gujar and Lingayat Vanis, three per cent Brahinans, three per cent Musalmans, and two per cent Vanjaris. The houses are generally poor with walls of hardened mud and flat roofs. Dwellings with stone walls are sometimes found. The husbandman's dress is of the coarsest kind and his household goods are seldom worth more than £2 10s. (Rs. 25). Only a small number of landholders have a large stock of cattle and a complete set of field tools. The rest have to borrow. Few garden crops are grown. The tillage is careless and manure and deep ploughing are almost unknown. Of the cultivating classes about five percent are proprietors with tenants, sixty per cent small landholders, and thirty-five per cent labourers. Marwari

Gujar and Lingayat Vanis and Brahmans, as a rule, do not work in the fields. Many Kunbis and Malis take to carting when field work is slack and add considerably to their scanty means of living. Dhangars feed large flocks of sheep and make a fair living by selling them and their butter and wool.

Communications.

The Ponna-Sholapur road runs through the sub-division by the central town of Indapur.

JUNNAR.

Boundaries.

Junnar, the most northerly sub-division, stretching from the Sahyadris to the eastern boundary of the district and lying between 18° 59' and 19° 22' north latitude and 73° 43' and 74° 24' east longitude is about thirty-five miles long and sixteen or seventeen miles broad. It is bounded on the north by the Akola, Sangamner, and Parner sub-divisions of Ahmadnagar; on the east by Parner; on the south by Parner and Khed separated from it for about fifteen miles by the Ghod; and on the west by the Murbad sub-division of Thana. Its area is 611 square miles, its 1881 population 102,273 or 167 to the square mile, and its 1881-82 land revenue £14,714 (Rs. 1,47,140).

Area.

Of an area, of 611 square miles 606 have been surveyed in detail. Of those 62 are the lands of alienated villages. The rest according to the rovenat- survey returns contains 236,408 acres or 67 per cent of arable land; 114,674 acres or 33 per cent of unarable land; 236,408 acres or 67 per cent of grass; 34,296 acres or 9 per cent of forest reserves; and 10,752 acres or about 3 per cent of village sites, roads, river beds, and hills. From the 236,407 acres of arable land, 18,727 acres or 5.3 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 217,680 acres the actual area of arable Government land, 203,224 acres or 57.75 per cent were under tillage in 1880.81. Of these 200,155 acres or 5687 per cent were dry-crop and 3569 acres or 0.87 per cent were watered garden lands.

Aspect.

Numerous spurs, forming distinct ranges, start at right angles to the Sahyadris in the west, and growing gradually smaller, barer, and tamer, spread many miles east and south-east. The chief of these ranges is the Harishchandragad range in the north which for some distance separates Poona from Ahmadnagar. South of this and parallel to it are two smaller spurs separated from each other by the narrow valleys which form the approach from the Deccan to the Malsej and,Nana passes. These ranges are neither so lofty nor so broad as the Harishchandragad range. They pass east for about fifteen miles and then near the town of Junnar disappear somewhat abruptly. To the south of these a fourth range bounds the Junnar and Khed sub-divisions as far as Mahalunga in Khed. Each of the

valleys lying between these spurs formed one of the old petty divisions or *tarfs* known as Minner, Kokadner, and Madhkhore. The most noted hills are Harishchandragad whose southern slopes only are in the sub-division, Shivner, Chavand, Hadsar, Jivdhan, and Narayangad, all of which are fortified and of great strength. Round Junnar there are three hills, Ganesh Pahad three miles to the north, Tuljadevi two miles to the west, and Manmodi one and a half miles to the south.

Except a few villages, Junnar consists of the two valleys of the Mina and the Kukdi. Towards the west the Kukdi valley splits into three ravines where the main river is joined by the Ar and the Pushpavati. In the east only a rising ground separates the valleys of the Mina and the Kukdi which might almost be called one plain. To the west of Junnar the valleys are separated by spurs of the Sahyadris that rise 3000 to 4500 feet above the sea and 1000 to 1500 feet above the plain. The sub-division thus forms two distinct portions to the east and west of the town of Junnar and Otur. The east half which includes perhaps three-fifths of the sub-division is open and except a few single hills is flat. The west is a mass of high hills and valleys more or less rugged and broken. In the east the soil is generally either black or a poor gravel. The black soil, except in a few villages in the centre of the sub-division and in a few places along the rivers, is generally thin or of strangely variable depth. In this portion the gentle slope from the base of the hills to the river banks is in every way suited for gardens, water being available either from wells or dams thrown across streams. In the west the soil is very variable. The Madhkhore or northern valley is comparatively flat and open and has a large area of black and blackish red soil. The central valley or Kokaduer is particularly rugged and broken with hardly any black soil, the prevailing soil being reddish; and the third or south valley the Minner, is a narrow strip of rolling country, with soil generally blackish but coarse and shallow. Except a little land watered from streams this part has no gardens, the place of garden crops being taken by rice of which a large area is grown. Every stream is dammed and every suitable hollow and dip is a rice patch. The rice soil varies considerably. In the Madhkhore on the north it is nearly all black or brownish-gray or brown, in Kokadner in the centre much is fine yellow and yellowish red, and in the Minner in the south it is nearly all black or brownish gray. Near the town of Junnar the valleys and garden lands are very rich. Over the whole sub-division the chief crop is bajri with about 44.7 per cent of the whole tillage. The next is wheat of which the best sorts are raised near Junnar and in the chief valleys. Large quantities of garden produce are grown especially in the centre and east. Plantains are a favourite crop at Ale and at Junnar, and Rajuri is famous for its vineyards, and large quantities both of grapes and of plantains go to the Foona and Bombay markets. The western and northern villages grow rice instead of garden crops. In the better soils a second crop of gram and peas is raised after the rice is cut and sometimes wheat and vegetables, and rarely sugarcane. On the mal or uplands the usual crops are nagli, sava, and khurasni. Where the slopes are not too steep the plough is used, but in many places bullocks cannot be used and the land is dug by hand. These steep tracts generally remain untilled for several years and then, as in the old wood-ash or dalhi system the bushes are cut and burnt. There is no fixed rule about ploughing. The heavier black soils are generally ploughed every second year, while the lighter soils are ploughed every year. The large area of land, 11,724 acres, watered from wells and channels has caused so heavy a demand for manure that dry-crop land is left totally unmanured. The

practice of sending the cattle to graze in the western villages reduces the supply of manure, and in the centre where the soil is good, it is not enough even for garden land.

Water.

Besides the Mina in the north and the Kukdi in the centre which have their sources in the Sahyadris a smaller river called the Pushpavati rises near the Malsej pass, flows through the Madh valley, receives the water of the Mandva, and meets the Kukdi near the village of Kivra. The Mina and the Kukdi are both feeders of the Ghod, which, for about ten miles, forms the southern boundary of the sub-division. They pass south-east in nearly parallel lines and hold water in pools throughout the year and on all of them are dams for channel-watering and wells.

Wells.

Besides about 260 wells used for drinking, about 3781 wells are used for watering the land. Of the whole number about 185 are with and about 3856 without steps. A well waters from one to five acres and the depth of water varies from four feet to nine feet. The cost of building a well varies from £10 to £50 (Rs. 100 - 500).

Climate.

The climate is dry and healthy and free from hot winds. Great heat and total failure of rain are very rare. Within the limits of the sub-division there is great variety of climate. On the western border the rainfall is abundant. The tract near Junnar is famous for its fine climate. Nowhere in Poona is the rainfall so general and so certain as here. During the twenty-one years ending 1881 the Junnar rainfall varied from 10.18 inches in 1862 to 3943 inches in 1878, and averaged 22.61 inches from 1860 to 1870 and 23.91 inches from 1871 to 1881.

Cultivators.

The chief husbandmen are Kunbis, Kolis, and Thakurs. Kolis and Thakurs who form about ten per cent of the people are found near the Sahyadris, and the Kunbis who form about sixty-five per cent in other parts of the sub-division. The husbandmen's houses are poor, built of hardened mud, with roofs of tiles, reeds, straw, mud, and. sticks. A few rich husbandmen have large houses with sloping tiled roofs. The average value of a husbandman's stock of house goods varies from £2 10s. to £7 10s. (Rs. 25 - 75). Their livestock generally includes one or 'more cows or she-buffaloes and one or more pair of bullocks with a few goats. A Koli's stock is less than a Kunbi's. Large vat-shaped grain stores are sometimes found attached to the houses of the better class of husbandmen. Most husbandmen are small landholders, a considerable number are labourers, and a small number are proprietors with tenants. Many in the intervals of field labour make money by carting. A few Dhangars weave blankets and Salis weave women's robes. The poorer families, both men women and children, often labour in the fields of the richer,

and receive regular wages. The rich landholders do a large business in lending grain and more rarely money to their poorer brethren.

Crops.

In 1881-82, of 203,184 acres, the whole area held for tillage, 20,190 acres or 9.93 per cent were fallow or under grass. Of the remaining 182,994 acres, 1843 were twice cropped. Of the 184,837 acres under tillage, grain crops occupied 163,704 acres or 88.56 per cent, of which 108,599 were under spiked millet bajri Penicillaria spicata; 21,677 under wheat gahu Triticum aestivum; 16,438 under Indian millet *jvari* Sorghum vulgare; 6983 under ragi or nachni Eleusine corocana; 4317 under sava and vari Panicum miliaceum. and miliare; 4169 under rice bhat Oryza sativa; 397 under kodra or harik Paspalum scrobiculatum; 6 under barley jav Hordeum hexastichon; one under rala or kang Panicum italicum; and 1117 under other grains of which details are not given. Pulses occupied 9659 acres or 5.22 per cent, pf which 4770 were under gram harbhara Cicer arietinum; 2220 under kulith or kulthi Dolichos biflorus; 769 under tur Cajanus indicus; 687 under mug Phaseolus mungo; 330 under udid Phaseolus radiatus; 329 under peas vatana Pisum sativum; 94 under lentils masur Ervum lens; and 460 under other pulses. Oilseeds occupied 7233 acres or 3.91 per cent, of which 5806 were under gingelly seed til Sesamum indicum; and 1427 under other oilseeds. Fibres occupied 15 acres. Miscellaneous crops occupied 4226 acres or 2.28 per cent, 1867 of which were under chillies *mirchi* Capsicum frutescens; 275 under tobacco *tambakhu* Nicotiana tabacum; 968 under sugarcane us Saccharum officinarum; and the remaining 1116 under various vegetables and fruits.

Stock.

According to the 1882-83 returns farm stock included 543 riding and 1529 load carts, 4288 two-bullock and 3848 four-bullock ploughs, 27,481 bullocks and 16,944 cows, 2731 he-buffaloes and 6320 she-buffaloes, 906 horses, 40,870 sheep and goats, and 856 asses.

People.

The 1881 population returns show, of 102,273 people, 97,241 or 95.07 per cent Hindus; 5006 or 4.89 per cent Musalmans; 22 Christians; and 4 Shaikhs. The details of the Hindu castes are: 6137 Brahmans; 988 Marwar Vanis, 354 Lingayats, 107 Gujarat Vanis, 50 Komtis, and 45 Vaishya Vanis, traders; 44,982 Kunbis and 7431 Malis, husbandmen; 1486 Badhais, carpenters; 1069 Chambhars, leather-workers; 1015 Telis, oilmen; 974 Kumbhars, potters; 950 Sonars, goldsmiths; 873 Salis, weavers; 840 Koshtis, weavers; 756 Shimpis, tailors; 325 Kasars, glassbangle-hawkers; 217 Lohars, blacksmiths; 95 Tambats, coppersmiths; 73 Buruds, bamboo-workers; 71 Beldars, quarrymen; 60 Bhavsars, dyers; 47 Nilaris, dyers; 38 Patharvats, stone-masons; 29 Khatris, weavers; 18 Ghisadis, polishers; 1,7 Rauls, weavers; 12 Lonaris, lime-burners; 10 Kataris, turners; 8 Jingars, painters; 6 Gaundis, masons; 932 Guravs, temple-servants; 990 Nhavis, barbers; 573 Parits, washermen; 1041 Dbangars, cowmen; 12,467 Kolis and 185 Bhois, fishers;

330 Rajputs, messengers; 2367 Thakurs, husbandmen; 1009 Ramoshis, watchmen; 246 Bhils, labourers; 181 Vadars, stonecutters; 137 Kathkaris, catechu-makers; 70 Vanjaris, grain-dealers; 64 Kaikadis, labourers; 5670 Mhars, village-servants; 632 Mangs, messengers; 273 Dhors, tanners; and 436 Gosavis, 169 Joshis, 112 Gondhlis, 106 Jangams, 73 Bharadis, 48 Kolhatis, 23 Manbhavs, 11 Aradhis, 5 Joharis, "4 Chitrakathis, and 4 Panguls, beggars.

Communications and Traffic.

Junnar has fair means of communication: all the market towns and villages lie on made roads. Of two metalled roads the Poona-Nasik high road passes north and south by the towns of Narayangaon and Ale; the other branches off the Poona-Nasik road at Narayangaon and goes as far as Junnar. Of several fair-weather local fund roads one runs east to the Ahmadnagar district and west to, the Konkan down the Malsej pass by the market towns of Belha, Ale, Otur, and Madh. At Belha the road has two branches one to Ahmadnagar through the Anna pass and the other through Parner joining the Poona-Ahmadnagar high road. The town of Junnar is connected with this road by two branches, one ending at Otur the other at Dingora. Another road fit for carts runs from Junnar to Ghatghar at the top of the Nana pass and though fit only for bullocks and buffaloes has a considerable traffic with the Konkan. Besides these some other short roads are passable for carts in the fair weather. Numerous villages on the tops of hills or in the broken west and north country are inaccessible to carts, pack animals being employed in carrying goods to and from them. The chief markets are at Junnar, Narayangaon, Ale, Madh, and Otur, and small ones at Belha and Anna both alienated villages. At Junnar is a large attendance and weekly sales amount to £200 (Rs. 2000). Besides the people of the villages round, those of the western villages and many from the Konkan below the Nana pass go to Junnar, bringing hill grains grown there, bundles of wood and grass, and baskets. In 1880-81, 1636 carts and 24,369 laden pack animals entered Junnar. The weekly sales at Narayangaon and Ale amount to about £45 (Rs. 450) each. The chief outside markets to which Junnar produce passes are Alkute in the Parner sub-division of Ahmadnagar to the east and the large cattle market of Manehar in Khed to the south. Besides weaving which is carried on in most of the large towns, paper-making is carried on in the town of Junnar to a considerable extent. The paper is sent to Poona, Sholapur, and the Nizam's dominions. The leading local exports are gram, chillies, potatoes, onions, plantains, oil-cake, paper, myrobalans, and sheep. The traffic chiefly passes by the Poona-Nasik and Junnar-Nanaghat roads.

From Ale, Narayangaon, and the Mina valley villages plantains potatoes and chillies go by cart either direct to Poona or branching off near Khed go through Talegaon by rail to Bombay or by road to Panvel for the Konkan. Chillies go in large quantities to Panvel from Narayangaon. Plantains worth £3000 to £4000 (Rs. 30,000-40,000) go to Poona from Ale. By this road too paper, cotton goods, and iron and other heavy goods are imported and exported. Prom December 1881 to March 1882, about 3500 pack animals a month passed up and down the Nanaghat road. The chief articles sent down were chillies, onions, wheat, *bajri*, oil-cake, and myrobalans mostly to Kalyan in Thana for export to Europe. A large number of sheep are forwarded by this road to Bombay. Over 10,000

passed during the four months of the cold weather of 1881-82. Flocks of sheep come from Sangamner and other sub-divisions of Ahmadnagar to graze in Junnar where they are welcomed on account of their manure, and dealers buy them and send them along with locally reared sheep to the Bombay markets. Along the Malsej route a fair amount of traffic passes between the northern part of the subdivision, Otur and Madh, and the Konkan. The exports are of the same kind as on the other roads, and the average number of pack animals is about 2900 a month. Otur has a little traffic with the Akola subdivision of Ahmadnagar, sending *bajri* and salt and getting rice and hill grains. A certain amount of cloth, potatoes, and tobacco go by the old Ahmadnagar road through Bori Budruk and Belha to the Ahmadnagar district, most of the carts passing as far as Yeola. The imports are less in quantity than the exports. Cotton goods, iron, copper vessels, groceries, and refuse scrap paper for the paper-makers are the leading articles brought by cart; the pack-bullocks chiefly bring salt and cocoanuts from the Konkan. Among the minor imports is kerosine oil.

KHED.

Boundaries.

Khed, one of the Sahyadri sub-divisions, lying between 18° 34' and 19° 13' north latitude and 73° 35' and 74° 15' east longitude, is bounded on the north by Junnar, on the east by Sirur, on the south by Haveli and Maval, and on the west by the Karjat and Murbad sub-divisions of Thana. Its area is 888 square miles. In 1881 its population was 141,890 or 160 to the square mile, and in 1881-82 its land revenue was £15,887 (Rs. 1,58,870).

Area.

Of an area of 877 square miles 822 have been surveyed in detail. Of these about 116 miles or 74,168 acres are the lands of alienated villages. The rest about 706 miles or 451,965 acres contains, according to the revenue survey returns, 292,278 acres or 64½ per cent of arable land; 159,686 acres or 35½ per cent of unarable land; 283,875 acres or 62 per cent of grass; 83,602 acres or 18 per cent of forest reserves; and 76 084 acres or 16 per cent of village sites, roads, river beds, and hills. From the 292,278 acres of arable land, 26,295 acres or 8 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 265,982 acres, the actual area of arable Government land, 257,580 acres or 96 per cent were under tillage in 1880-81. Of these 252,381 acres or 98 per cent were dry-crop and 5198 acres or 2 per cent were watered garden land.

Aspect.

Within Khed limits are two large chains of hills one in the north which separates it from Junnar and one in the south which separates it from Maval. Besides these, two smaller ranges of hills cross the centre. These ranges divide Khed into three leading valleys of the Bhima, the Bhama, and the Indrayani. The east is a series of tablelands, divided and

crossed by mountains and hills; towards the west as it approaches the Sahyadris, the country becomes still more broken and rugged. Most of the soil is either red or gray.

The Maval or west has little dry crop tillage. Much of the soil can be cropped only at intervals of several years. Rice is the great staple and rent-paying product, the other crops being *nachni*, *vari*, and *sava* which supply the food on which the bulk of the people live. The east of the sub-division which is fairly level grows the ordinary dry-crops chiefly those that belong to the early harvest. Much of the deep black and brown soil is moisture-holding and yields two crops *bajri* followed by gram. The villages near Khed and Chakan have a large area under pepper, which in low moist places is grown as a monsoon crop. Considerable quantities of potatoes are grown. The husbandry on the whole is good. Manure is regularly used and is so much appreciated that husbandmen bring it back from Poona after disposing of their *jvari* straw.

Climate.

The climate is generally good. During the four years ending 1873-74 the rainfall averaged 24.12 inches.

Water.

The rivers Ghod, Bhima, Bhama, and Indrayani water the subdivision, flowing west to east in nearly parallel courses. All have water in pools throughout the hot season.

Wells.

Besides 611 wells used for drinking about 2623 wells are used for watering the land. Of the whole number about 434 are with and 2800 without steps. A well waters from four to six acres and the depth of water varies from two to twenty-four feet. The cost of building a well varies from 10s. to £200 (Rs. 5 - 2000).

Crops.

In 1881-82,of 257,420 acres, the whole area held for tillage, 30,123 acres or 11.70 per cent were fallow or under grass. Of the remaining 227,297 acres, 4288 were twice cropped. Of the 231,585 acres under tillage, grain crops occupied 194,268 acres or 83.88 per cent, of which 107,856 were under spiked millet *bdjri* Penicillaria spicata 28,782 under Indian millet *jvari* Sorghum vulgare, 16,310 under *ragi* or *nachni* Eleusine corocana; 11,163 under *sava* and *vari* Panicum miliaceum and miliare; 8205 under wheat *gahu* Triticum sestivum; 5998 under rice *bhat* Oryza sativa; and 15,954 under other grains of which details are not given. Pulses occupied 17,144 acres or 7.40 per cent of which 4329 were under gram *harbhara* Cicer arietinum; 4056 under *kulith* or *kulthi* Dolichos biflorus; 2349 under *mug* Phaseolus mungo; 1399 under *tur* Cajanus indicus; 1031 under *udid* Phaseolus radiatus; 329 under peas *vatana* Pisum sativum; 302 under lentils *masur* Ervum lens; and 3349 under other pulses. Oilseeds occupied 13,367 acres or 5.77 per cent, of which 12,381 were under gingelly seed *til* Sesamum indicum and 986

under other oilseeds. Fibres occupied 16 acres all of them under brown hemp *ambadi* Hibiscus cannabinus. Miscellaneous crops occupied 6790 acres or 293 per cent, of which 3708 were under chillies *mirchi* Capsicum frutescens; 428 under sugarcane *us* Saccharum officinarum; 239 under tobacco *tambakhu* Nicotiana tabacum; and the remaining 2415 under various vegetables and fruits.

Stock.

According to the 1882-83 returns farm stock included 383 riding and 3224 load carts, 7436 two-bullock and 4849 four-bullock ploughs, 44,176 bullocks and 31,664 cows, 1946 he-buffaloes and 10,858 she-buffaloes, 1252 horses, 19,409 sheep and goats, and 783 asses.

People

The 1881 population returns show, of 141,890 people 138,274 or 97.45 per cent Hindus; 3601 or 253 per cent Musalmans; 14 Christians; and one Parsi. The details of the Hindu castes are: 5599 Brahmans; 16 Velalis, 15 Kayasth Prabhus, and 10 Patane Prabhus, writers; 1156 Marwar Vanis, 585 Lingayats, 487 Gujarat Vanis, 99 Vaishya Vanis, and 35 Komtis, traders; 68,913 Kunbis, 6104 Malis, and 7 Kachis, husbandmen; 1855 Chambhars, leather-workers; 1904 Badhais, carpenters; 1298 Kumbhars, potters; 1225 Telis, oilmen; 1188 Sonars, goldsmiths; 590 Shimpis, tailors; 468 Koshtis, weavers; 410 Lobars, blacksmiths; 297 Salis, weavers; 257 Kasars, glassbangle-hawkers; 95 Patharvats, stone-masons; 68 Buruds, bamboo-workers; 46 Nilaris, dyers; 52 Beldars, quarrymen; 35 Otaris, casters; 30 Bhavsars, dyers; 22 Lonaris, lime-burners; 19 Tambats, coppersmiths; 17 Rauls, weavers; 16 Ghisadis, polishers; 11 Khatris and 6 Sangars, weavers; one Jingar, painter; 1240 Guravs, temple-servants; 12 Ghadshis, musicians; 1374 Nhavis, barbers; 547 Parits, washermen; 2446 Dhangars, cowmen; 13 Gavlis, cowkeepers; 21,255 Kolis and 220 Bhois, fishers; 294 Rajputs, messengers; 25 Kalals, distillers; 17 Bhandaris, palm-tappers; 3 Lodhis, labourers; 2 Kamathis, house-builders; 2465 Thakurs, husbandmen; 1229 Ramoshis, watchmen; 236 Kathkaris, catechu-makers; 221 Vadars, stonecutters; 114 Kaikadis, labourers.; 97 Vanjaris, grain-dealers; 12 Bhils, labourers; 11,094 Mhars, village servants; 786 Mangs, messengers; 182 Dhors, tanners; and 422 Gosavis, 241 Bharadis, 199 Joshis, 171 Gondhlis, 128 Jangams, 71 Chitrakathis, 59 Vaidus, 27 Jogis, 27 Joharis, 26 Kolhatis, 22 Manbhavs, 21 Bhamtas, 16 Vasudevs, 13 Bhats, 5 Aradhis, 4 Panguls, and 2 Tirmalis, beggars.

Cultivaors.

The leading cultivating classes are Kunbis, Thakurs, Kolis, and Mhars. About sixty per cent of the husbandmen are Kunbis, ten per cent Thakurs, ten per cent Kolis, and ten per cent Mhars. In the larger villages some well-to-do cultivators, not more than ten per cent, have good houses. Most houses are made of hardened mud with sloping roofs of tile or of reeds. Well-to-do landholders own two to four and a few as many as ten pairs of bullocks and a large quantity of grain in store. The poorer cultivators have grain enough to last them eight months, and for the other four months they have to buy or borrow. About sixty

per cent of the cultivators are small landholders, thirty per cent labourers, and ten per cent proprietors with tenants.

Communication.

Almost all Khed villages have easy access to Poona, many of them by the Poona-Junnar road passing through the sub-division. Those on the banks of the Bhima and in the east can generally cross into the direct road from Ahmadnagar; others avail themselves of the Alandi road which is always passable by carts. Husbandmen take full advantage of this easy transport, and send to Poona large quantities of grain and fodder or *kadbi*.

The chief market towns are Khed, Chakan, Aihera, Vada, and a few other small places; Aihera is the largest market in the west, a centre whence rice is sent inland and below the Sahyadris.

MAVAL.

Boundaries.

MA'VAL. one of the Sahyadri sub-divisions, with the head-quarters at Khadkala lying between 18° 36'and 18° 59' north latitude and 73° 26' and 73° 51' east longitude, is bounded on the north by Khed, on the east by Haveli, on the South by Bhor territory and Haveli, and on the west by Bhor territory, the Pen sub-division of Kolaba, and the Karjat sub-division of Thana. Its area is 385 square miles, its 1881 population 62,383 or 162 to the square mile, and its 1881-82 land revenue £7586 (Rs. 75,860).

Area.

Of an area of 354 square miles 230,438 acres have been surveyed in detail. Of these 17,665 are the lands of alienated villages. The rest according to the revenue survey returns contains 138,950 acres or 65 per cent of arable land, 24,762 acres or 11 per cent of unarable, 44,419 acres or 21 per cent of grass, 231 acres or 10 per cent of forest reserves, and 4409 or 2 per cent of village sites, roads, riverbeds, and hills. From the 138,950 acres of arable land 15,277 or 11 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 123,673 acres, the actual area of arable Government land, 110,889 or 89 per cent were under tillage in 1880-81. Of these 110,862 acres or 99 per cent were dry-crop and 26 acres or one per cent were watered garden land.

Aspect.

Three leading spurs from the Sahyadris cross the sub-division. The largest passes east across its whole length in the south, a second, which though not so high is broader, penetrates to the centre, and the third forms the north-eastern boundary for about twenty miles.

The general features of Maval are like those of other Sahyadri sub-divisions. Except the range in which are the forts of Visapur and Lohogad the hills which cross it are not perhaps so large as they are elsewhere; the valleys are also generally more open and level. A striking example of this is in that part of the sub-division which is crossed by the road from Poona to Bombay. The level plain begins three or four miles from Khandala and stretching almost to the foot of the hills which overlook the road on each side, it spreads to within a short distance of Vadgaon. The western parts of the Mulshi petty division are more rugged and waving than any other parts near the Sahyadris. The sub-division is fairly wooded.

Soil.

Red and gray are the leading soils, black being found only on the banks of rivers and large streams. The chief dry-crop products are *nachni*, *sava*, and *til* for the *kharif* or early crops and wheat and gram for the *rabi* or late crops. *Bajri* and *jvari* are grown to a small extent in a few villages on the eastern border. The black soil lands are suited only for late crops. Rice is the crop from which the cultivators pay their revenue. It is for the most part sent to the Poona market. A little goes below the Sahyadris and a smaller portion is kept for retail sale at the great halting places along the line of road, of which Vadgaon and Khandala are the chief. No manure is applied to any lands in Maval except what they receive from the burning of brushwood and grass, a practice which is confined to rice and *nachni* seed beds.

Water.

The Indrayani, rising on the western border of the sub-division, passes south-east through its entire length. The Andhra a smaller stream rises in the north-west of the district and has a course of some seventeen miles before it falls into the Indrayani.

At Talegaon Dabhade a pond covering thirty-seven acres and fifty feet deep holds water all the year round, and waters some garden land. It was built about seventy years ago by Dabhade Senapati. The village ponds of Mundhve, Khandala, Vadgaon, Kusur, and Valvhan also hold water throughout the year.

Wells.

Besides 486 wells used for drinking about 55 wells are used for watering the land. Of the whole number about 225 are with and 261 without steps. A well waters from ten to thirteen acres and the depth of water varies from one or two feet in Andar Maval to twenty feet in Chakan. The cost of building a well varies from £20 to £120 (Rs. 200 - 1200).

Climate.

Though rice grows throughout the sub-division the rainfall varies greatly in different parts. It is very heavy close to the Sahyadris, and considerably lighter near the eastern

boundary. Hot winds are almost unknown, and the climate generally is cooler than in the east.

Crops.

In 1831-82, of 111,050 acres, the whole area held for tillage, 47,125 acres or 42.3 per cent were fallow or under grass. Of the remaining 63,925 acres, 27 were twice cropped. Of the 63,952 acres mules-tillage, grain crops occupied 54,846 acres or 8575 per cent, of which 14990 were under rice bhat Oryza sativa; 14,036 under ragi or nachni Eleusine corocana; 9537 under wheat gahu Triticum restivum: 7885 under sava and vari Panicum miliaceum and miliare; 4618 under spiked millet bajri Penicillaria spicata; 2919 under Indian millet *jvari* Sorghum vulgare; and 831 under other grains of which details are not given. Pulses occupied 3613 acres or 5.64 per cent, of which 2678 were under gram harbhara Cicer arietinum; 440 under lentils masur Ervum lens; 95 under tur Cajanus indicus; 76 under peas vatana Pisum sativum; 21 under udid Phasoolus radiatus; one under mug Phaseolus mungo; and 302 nuder other pulses. Oilseeds occupied 5403 acres or 8.44 per cent, all of which were under gingelly seed *til* Sesamum indicum. Fibre.; occupied 10 acres or 0.01 per cent, of which 7 were under Bombay hemp san or tag Crotalaria juncea; and three under other fibres. Miscellaneous crops occupied 80 acres or 0.12 per cent, of which 34 were under chillies *mirchi* Capsicum frutescens; 22 under sugarcane us Sacchafum officinarum; and the remaining 24 under various vegetables and fruits.

According to the 1882-83 returns farm stock included twenty-two riding and 2065 load carts, 6213 two-bullock and 813 four-bullock ploughs, 16,523 bullocks and 12,370 cows, 2810 he-buffaloes and 4175 she-buffaloes, 293 horses, 1927 sheep and goats, and sixty-four asses.

People.

The 1881 population returns show, of 62,383 people 59,674 or 95.65 per cent Hindus; 1976 or 3.16 per cent Musalmans; 612 or 0.98 per cent Christians; 70 Parsis; 50 Jews, and one Buddhist. The details of the Hindu castes are: 2285 Brahraans; 76 Kayasth Prabhus, 22 Patane Prabhus, and 9 Velalis, writers; 626 Marwar Vanis, 252 Gujarat Vanis, 155 Lingayats, 42 Vaishya Vanis, and 5 Agarvals, traders; 32,115. Kunbis and 579 Malis, husbandmen; 1327 Telis oilmen; 1237 Chambhars leather workers; 535 Kumbhars, potters; 798 Badhais, cai'penters; 489 Sonars, goldsmiths; 283 Shimpis, tailors; 100 Beldars, quarrymen; 92 Lohars, blacksmiths; 84 Buruds, bamboo-workers; 82 Kasars, glassbangle-hawkers; 52 Jingars, painters; 30 BhaVsars, dyers; 26 Ghisadis, polishers; 21 Tambats, coppersmiths; 18 Sangars, weavers; 11 Bhadbhunjas, grainparchers; 8 Khatris, weavers; 7 Lonaris, lime-burners; 3 Salis and one Raul, weavers; 2 Otaris, casters; 671 Guravs, temple-servants; 729 Nhavis, barbers; 389 Parits, washermen; 1038 Dhangars, cowmen; 47 Gavlis, cow keepers; 3630 Kolis and 354 Bhois, fishers; 171 Rajputs, messengers; 78 Kamathis, house-builders; 4 Kalals, distillers; 2 Bhandaris, palm tappers; 538 Ramoshis, watchmen; 361 Kathkaris, catechu-makers; 157 Thakurs, husbandmen; 103 Vanjaris, grain-dealers; 72 Kaikadis, labourers; 66

Vadars, stone-cutters; 8948 Mhars, village servants; 436 Mangs, messengers; 85 Dhors, tanners; 22 Halalkhors, scavengers; and 135 Gosavis, 94 Bharadis, 46 Jangams, 34 Joshis, 23 Gondhlis, 23 Kolhatis, 13 Chitra-kathis, 7 Aradhis, 6 Tirmalis, 6 Vasudevs, 5 Bhats, 4 Holars, 3 Panguls, 1 Jogi, and 1 Johari, beggars.

Cultivators.

The chief husbandmen are Kunbis, Mhars, Mangs, Dhangars, Kolis, and Malis. Most of their houses are poor, the walls made of hardened earth occasionally mixed with stone with sloping roofs generally tiled and sometimes thatched with reeds and leaves. The poorest husbandmen own no bullocks. Some have one or two pairs, others as many as eight or ten, one or two she-buffaloes or cows, and some sheep and goats. The better-off cultivators have sometimes considerable stores of grain but most have no more than is required to supply food or seed and to sell or exchange for cloth. Nearly seventy per cent of the cultivating classes are small proprietors, twenty per cent are mere labourers, and the rest proprietors with tenants.

Communications.

The Bombay road passes through the sub-division, and the villages along or at a short distance from the line derive a considerable advantage from the sale of grass for the numerous droves of cart and pack bullocks that daily halt at the different stages on the road.

PURANDHAR.

Boundaries,

Purandhar, one of the southern sub-divisions with its head-quarters at Sasvad and lying between 18° 6' and 18° 26' north latitude and 73° 56' and 74° 24' east longitude, is bounded on the north by Haveli and Bhimthadi; on the east by Bhimthadi; on the south by the Vai sub-division of Satara and the Bhor territory; and on the west by Bhor and Haveli. It covers an area of 470 square miles, its 1881 population was 75,678 or 161 to the square mile, and its 1881-82 land revenue was £9776 (Rs. 97,760).

Area.

Of an area of about 457 square miles 450 have been surveyed in detail. Of these 114 are the lands of alienated villages. The rest, according to the revenue survey returns, contains 166,388 acres or 76 per cent of arable land; 18,720 acres or 12 per cent of unarable; 5952 or 8 per cent, of grass; 26,655 or 13 per cent of forest reserves, and 7076 or 3 per cent of village sites, roads, river beds, and hills. From the 166,388 acres of arable land 24,778 or 15 per cent have to be taken on account of alienated lands in Government villages. Of the balance of 141,610 acres, the actual area of arable Government land, 141,503 or 99 per cent were under tillage in 1880-81. Of these 134,039 acres or 94 per cent were dry-crop and 6835 acres or 4 per cent were watered garden land.

Aspect.

Purandhar is hilly, in fact mountainous. The different ranges tend north-east and south-west, dividing it into two valleys along which flow almost parallel streams. The spur of the Sahyadris which is the water-shed between the Bhima and the Nira runs along the northern boundary of the sub-division. Its leading summits are those on which stand the fort of Malhargad and the Hindu temples of Bhuleshvar and Dhavaleshvar. A branch of the same spur fills the south half of the sub-division, the only important peak being crowned by the twin forts of Purandhar and Vajragad. The general level is about 2800 feet above the sea, and the hill of Purandhar is nearly 1700 feet higher, on which about 400 feet from the summit is the fort of the same name. The valleys, chiefly the northern valley, have some fairly level well wooded tracts. Along the streams, especially the Karha, are found small tracts of alluvial soil. Elsewhere, except on the flat tops of some of the hills, the soil is shallow and rocky.

The mode of husbandry is like that in the neighbouring subdivisions, except that the land is oftener ploughed, the light soils yearly and the heavier black soils once in two years. The husbandmen also snow unusual energy in cultivation. Manure is applied to dry-crop lands and the garden lands generally get as much as fifty eart-loads to the acre for sugarcane and twenty to thirty cart-loads for ordinary crops. The manure is the usual farmyard refuse or sheep-droppings. Most villages grow a second crop of gram after the *bajri* or other early crop has been cleared. The raw sugar or *gul* of this sub-division is much prized for its high quality and firmness which stands long journeys. It fetches about 4s. (Rs. 2) the *palla* of 120 *shers* more than that made in other parts of the district. The special strength of the Purandhar sugar is said to be due to their peculiar practice of keeping the cane in the ground eighteen months instead of twelve. The cane is planted in May or June and cut in November or December of the following year. The chief crop is *bajri* which covers 48 per cent of whole area under tillage, the next highest is *jvari* with 27.2 per cent. Of the whole area under tillage 51.5 per cent are under early and 48.5 per cent under late crops.

Water.

The Nira forms the southern boundary of the sub-division nearly continuously for twenty miles, and the Karha a small feeder of the Nira rises in the north-west corner and passes east across the sub-division. The other leading stream is the Ganjauni. Into these three rivers the sub-division drains through small valleys, each with a stream giving a good supply of water four or five months after the rains are over. All three rivers run all the year round, and from the lowness of its banks the Karha is of great use to the landholders who push back its water with dams and raise it with lifts. When the Nira Water Works are completed a large area of Purandhar will be commanded. Two masonry ponds at Jejuri, one of about fifteen the other of nearly forty acres, were built at the close of the last century in honour of the god Khandoba by Holkar and Savai Madhavrav Peshwa. Both hold water throughout the year.

Wells.

Besides 280 wells used for drinking about 1677 wells are used for watering the land. Of the whole number about 368 are with and 1589 without steps. A well waters from $2\frac{1}{2}$ to $8\frac{1}{2}$ acres, and the depth of water varies from twenty to forty-five feet. The cost of building a well varies from £50 to £120 (Rs. 500- 1200).

Climate.

The rainfall during the six years ending 1876-77 varied from 14.62 inches in 1872-73 to 31.26 inches in 1874-75 and averaged 20.24 inches. In the east of the sub-division the fall is short but as the country becomes more hilly the supply gradually improves towards the west. Its height above the sea, its unfailing water supply, and its woody valleys combine to make Purandhar one of the pleasantest and healthiest parts of the district.

Crops.

In 1881 -82, of 141,548 acres, the whole area held for tillage, 17,502 acres or 12.36 per cent were fallow or under grass. Of the remaining 124,046 acres, 2225 were twice cropped. Of the 126,271 acres under tillage, grain crops occupied 117,997 acres or 93.44 per cent, of which 73,026 were under Indian millet *jvari* Sorghum vulgare; 32,820 under spiked millet bajri Penicillaria spicata; 2464 under ragi or nachni Eleusine corocana; 2435 under maize makka Zea mays; 1489 under rice bhat Oryza sativa; 1012 under wheat gahu Triticum aestivum; 689 under saca and vari Panicum miliaceum and miliare; 681 under rala or kang Panicum italicum; 20 under barley jav Hordeum hexastichon; and 3361 under other grains of which details are not given. Pulses occupied 5233 acres or 414 per cent, of which 2158 were under kulith or kulthi Dolichos biflorus; 1620 under gram harbhara Cicer arietinum; 250 under mug Phaseolus mungo; 237 under tur Cajanus indicus; 90 under *udid* Phaseolus radiatus; and 878 under other pulses. Oilseeds occupied 501 acres or 0.39 per cent, of which 221 were under gingelly seed *til* Sesamum indicum; 9 under linseed alshi Linum usitatissimum; and 271 under other oilseeds. Fibres occupied 91 acres or 0.07 per cent, of which 89 were under Bombay hemp sari or tag Crotalaria juncea; and 2 under brown hemp *umbadi* Hibiscus cannabinus. Miscellaneous crops occupied 244.9 acres or 1.93 per cent, of which 1022 were under sugarcane us Saccharum officinarum; 140 under chillies *mirchi* Capsicum frutescens; and the remaining 1287 under various vegetables and fruits.

According to the 1882-83 returns farm stock included 257 riding and 1093 load carts, 1540 two-bullock and 3017 four-bullock ploughs, 23,987 bullocks and 13,883 cows, 597 he-buffaloes and 3540 she-buffaloes, 1252 horses, 31,267 sheep and goats, and 589 asses.

People.

The 1881 population returns show, of 75,678 people 73,889 or 97.63 per cent Hindus; 1570 or 2.07 per cent Musalmans; 216 or 028 per cent Christians; and three Parsis. The details of the Hindu castes are: 3531 Brahmans; 128 Kayasth Prabhus and 3 Patane Prabhus, writers; 346 Lingayats, 283 Marwar Vanis, 154 Gujarat Vanis, 90 Vaishya Vanis, 5 Agarvals, and one Komti, traders; 38,555 Kunbis and €880 Malis, husbandmen;

1965 Chambhars, leather workers; 730 Badhais, carpenters; 670 Sonars, goldsmiths; 654 Salis, weavers; 619 Kumbhars, potters; 563 Telis, oilmen; 545 Shimpis, tailors; 201 Lohars, blacksmiths; 161 Kasars, glassbangle-hawkers; 137 Koshtis, weavers; 60 Beldars, quarrymen; 45 Bhavsars, dyers; 4t Tambats, coppersmiths; 37 Lonaris, limeburners; 15 Rauls, weavers; 10 Otaris, casters; 10 Patharvats, stone masons; 10 Sangars, weavers; 9 Buruds, bamoo-workers; 8 Kacharis, glass-bangle-makers; 5 Gaundis, masons; 1 Halvai, sweetmeat-seller; 861 Guravs, temple-servants; 135 Ghadshis, musicians; 858 Nhavis, barbers; and 440 Parits, washermen; 2214 Dhangars, cowmen; 10 Gavlis, cowkeepers; 1118 Kolis and 158 Bhois, fishers; 83Rajputs, messengers; 2784, Ramoshis, watchmen; 203 Vadars, stone-cutters; 109 Thakurs, husbandmen; 77 Kaikadis, labourers; 73 Vanjaris, grain-dealers; 6584 Mhars, village-servants; 1193 Mangs, messengers; 16 Halalkhors, scavengers; 152 Gosavis, 131 Joshis, 46 Gondhlis, 37 Bharadis, 37 Jangams, 28 Virs, 20 Vaghyas, 12 Holars, 11 Joharis, 9 Kolhatis, 8 Aradhis, 7 Vasudevs, 2 Manbhavs, and one Bhat, beggars.

Cultivators.

The cultivating classes are Kunbis, Marathas, Malis, Kolis, Dhangars, Kumbhars,. Mhars, Mangs, Ramoshis, Brahmans, and Muhammadans. Except about fifteen per cent of the richer landholders who live in good houses with stone walls and tiled roofs, Kunbis and Marathas live in ordinary houses with walls of hardened earth and flat or tiled roofs. In the hill parts the roofs are generally sloping and thatched. Most cultivators have one to ten pairs of bullocks, some cows, buffaloes, goats, and sheep, and a full set of field tools. A fairly well-to-do landholder keeps by him a sufficient store of grain for food and seed. Except when his arrangements fail or when times are hard he seldom has to apply to moneylenders for seed. About sixty per cent of the cultivators are landowners, twenty per cent labourers, and the rest proprietors with tenants.

Communications.

Of late years communications have been greatly improved, and when the Poona-Londha or West Deccan Railway line is finished Purandhar will be one of the most favoured parts of the district. The Poona-Satara road through the Babdev pass is used by carts as a means of communication from the villages near it to the chief market town of Sasvad where it joins the new road to Poona through the Diva pass. Numerous roads branch from Sasvad. One goes south-east to Jejuri where it is joined by a branch from the main road from the Diva pass, which continues through the market town of Valha to the Nira bridge. This road is metalled and bridged throughout. Half-way from the Babdev pass on the road to Sasvad another road branches to the fort of Purandhar, but since the Diva road was finished this line has not been much used. Another road, fairly metalled but not bridged, goes from Sasvad to the south-west, and after passing through the Sapgir gorge joins the main road from Poona to Satara through the Katraj pass close to the village of Kapurhol in the Pant Sachiv's State. The Katraj road after passing through some of the south-western villages crosses the Nira not far from the market town of Kikvi. Another made but unbridged road goes from Sasvad to the south, passes through the Pimpla gorge close to the village of Parincha and on to the river Nira not far from the village of Tondla. Another road, leaving the main Diva pass route, close to the village of Belsar, crosses the Bhor pass to the railway station of Urali on the Peninsula Railway and is fit for carts. Of three fair weather roads one leads from Sasvad to Supa in Bhimthadi, and two pass east from Jejuri. The local market towns are Sasvad, Valha, Parincha, and Kikvi. Except Sasvad they are of no great importance. Almost the whole field produce goes to Poona as the numerous good roads throughout the sub-division make the journey easy and speedy. Its thrifty skilful husbandmen and its immediate prospect of unfailing water from the Nira canal and of railway communication with Poona have combined to draw the attention of those interested to Purandhar as perhaps the most favourable part of the Deccan in which to try the experiment of an Agricultural Bank.

SIRUR.

Boundaries.

Sirur, in the north-east of the district lying between 18° 31' and 19° 1' north latitude and 74° 5' and 74° 40' east longitude and about thirty-eight miles long and thirty-six miles broad, is bounded on the north by Junnar and the Parner sub-division of Ahmadnagar separated by the Ghod river; on the east by Shrigonda also a sub-division of Ahmadnagar; on the south by Bhimthadi and Haveli both separated from it by the Bhima; and on the west by Khed and Junnar. One village is detached about five miles from the north boundary on the Poona and Ahmadnagar border. Its area is 578 square miles, its 1881 population was 72,793 or 126 to the square mile, and its 1881-82 land revenue was £13,759 (Rs. 1,37,590).

Area.

Of an area of above 577 square miles 366,589 acres have been surveyed in detail. Of these 64,480 acres are the lands of alienated villages. The rest, according to the revenue survey returns, contains 248,063 acres or 82 per cent of arable land; about 8 per cent of unarable land; 3 per cent of grass; 2 per cent of forest reserves; 4 per cent of village sites, roads, river beds, and hills. From the 248,063 acres of arable land, 4034 or 4 per cent have to be taken on account of alienated lands in Government villages. The whole balance of 234,029 acres, the actual area of arable Government land, was under tillage in 1880-81. Of these 229,862 acres or 76 per cent were dry-crop and 4167 acres or 24 per cent were watered garden land.

Aspect

Sirur consists of stony uplands seamed towards the centre by rugged valleys, but towards its river boundaries sloping into more open plains. The chief features are low hills and uplands. The low hills are sometimes rugged and steep; and the uplands have in some cases rich tracts of good soil, and in others are poor and stony with, especially in the south-east corner, gentle wavings passing into a fairly level plain. The country is throughout sparsely wooded. The prevailing soil is a light friable gray, freely mixed with gravel, which requires seasonable and frequent falls of rain to make it yield. The best

upland soils are purplish black of suddenly changing depth and very productive even with a comparatively scanty rainfall. The villages lying along the Bhima and the Ghod, especially near their meeting have a fair share of black soil, and black soil is also found in the dips and hollows of other villages. *Bajri* and *jvari* are the staple crops. Manure as a rule is applied to watered lands, and to a limited extent to dry crop lands; Garden tillage is carried on by means of channels or *pats* and wells, but chiefly by wells. The fair weather *bandharas* or dams, 127 in number, are made year after year when the rains are over. Few streams flow till the middle of May and most are dry by the middle of March. In 1881, 164 acres were watered by channels, 424 by channels and wells combined, and 2543 by wells, making a total watered area of 3131 acres. Of the 3131 watered acres 186 were under the richer crops, sugarcane, betel-leaf, plantains, grapes, and other fruits, and the rest under poorer crops, groundnuts, chillies, onions, potatoes, sweet-potatoes, wheat, and gram. The husbandry is similar to, but in many places is more efficient and careful than that practised in other parts of the district. On unwatered land as a rule only one crop is grown, though some tracts with good moisture-holding soil yield a second crop.

Water.

The Bhima after forming the southern and its feeder the Ghod after forming the northern boundary of the sub-division, meet at its south-eastern corner, while the Vel entering from the west falls into the Bhima after a course of about eighteen miles. The Kukdi a feeder of the Ghod also touches the extreme northern corner of the sub-division.

Climate.

The rainfall at Sirur during the twelve years ending 1881 varied from 9.91 inches in 1871 to 23.72 inches and averaged 17.39 inches.

Wells.

Besides 337 wells used for drinking, about 1620 wells are used for watering the land. Of the whole number about 209 are with and 1748 without steps. A well waters from three to four acres and the depth of water varies from four to twelve feet. The cost of building a well varies from £40 to £100 (Rs. 400 - 1000).

Crops.

In 1881-82, of 224,126 acres, the whole area held for tillage, 17,434 acres or 7.77 per cent were fallow or under grass. Of the remaining 206,692 acres, 2181 were twice cropped. Of the 208,873 acres under tillage, grain crops occupied 178,945 acres or 85.67 per cent, of which 116,306 were under spiked millet *bajri* Penicillaria spicata; 57,239 under Indian millet *jvari* Sorghum vulgare; 4919 under wheat *gahu* Triticum aestivum; 68 under *rala* or *kang* Pani-cum italicum; 9 under maize *makka* Zea mays; and 404 under other grains of which details are not given. Pulses occupied 19,885 acres or 9.52 per cent, of which 7830 were under *tur* Cajanus indicus; 2360 under gram *harbhara* Cicer arietinum; 942 under *kulith* or *kulthi* Dolichos biflorus; 5 under *mug* Phaseolus mungo;

and 8748 under other pulses. Oil-seeds occupied 748S acres or 3.58 per cent, of which 878 were under gingelly seed *til* Sesamum indicum; three under linseed *alshi* Linum usitatissimum; and 6607 under other oil-seeds. Fibres occupied 526 acres or 0.25 per cent all of them under Bombay hemp *san* or *tag* Crotalaria juncea. Miscellaneous crops occupied 2029 acres or 0.97 per cent of which 1131 were under chillies *mirchi* Capsicum frutescens; 878 under sugarcane *us* Saccharum officinarum; 84 under tobacco *tambakhu* Nicotiana tabacum; and the remaining 436 under various vegetables and fruits.

Stock.

According to the 1882-83 returns farm stock included 472 riding and 1512 load carts, 1432 two-bullock and 4080 four-bullock ploughs, 27,296 bullocks and 18,255 cows, 517 he-buffaloes and 2183 she-buffaloes, 1484 horses, 38,107 sheep and goats, and 736 asses.

People.

The 1881 population returns show, of 72,793 people 68,674 or 94.34 per cent Hindus; 4036 or 554 per cent Musaluians; 81 Christians; and two Jews. The details of the Hindu castes are: 2159 Brahmans; 22 Kayasth Prabhus, writers; 1365 Marwar Vanis, 285 Lingayats, 214 Gujarat Vanis, 79 Komtis, 44 Vaishya Vanis, and 15 Agarvals, traders; 34,566 Kunbis, 6661 M&lis, and 48 Kachis, husbandmen; 1639 Chambhars, leatherworkers; 710, Badhais, carpenters; 653 Salis, weavers; 648 Kumbhars, potters; 647 Sonars, goldsmiths; 582 Telis, oilmen; 549 Shimpis, tailors; 358 Lohars, blacksmiths; 281 Kasars, glassbangle-hawkers; 138 Sangars, weavers; 85 Lonaris, lime-burners; 46 Jingars, painters; 41 Buruds, bamboo-workers; 41 Koshtis, weavers; 36 Tambats, coppersmiths; 35 Bhavsars, dyers; 32 Patharvats, stone-masons; 16 Rauls, weavers; 12 Nilaris, dyers; 8 Ghisadis, polishers; 4 Beldars, quarrymen; 362 Guravs, temple-servants; 27 Ghadshis, musicians; 758 Nhavis, barbers; 555 Parits, washermen; 3286 Dhangars, cowmen; 41 Gavlis, cowkeepers; 560 Kolis and 178 Bhois, fishers; 171 Rajputs, messengers; 26 Kamathis, house-builders; 1717 Ramoshis, watchmen; 274 Vadars, sbone-cutters; 131 Vanjaris, grain-dealers; 63 Kaikadis, labourers; 71 Thakurs, husbandmen; 37 Bhils, labourers; 34 Phasepardhis, hunters; 5548 Mhars, villageservants; 1514 Mangs, messengers; 73 Dhors, tanners; 43 Halalkhors, scavengers; 420 Gosavis, 151 Joshis, 137 Manbhays, 105 Bharadis, 65 Bhamtas, 63 Jangams, 59 Kolhatis, 53 Vaidus, 43 Gondhlis, 40 Chitrakathis, 37 Bhats, 9 Aradhis, and 4 Vasudevs, beggars.

Cultivators.

The cultivating classes, who form nearly two-thirds of the whole population, are chiefly Kunbis and Malis who are found throughout the sub-division. A few members of other castes till themselves or by tenants. Most husbandmen's houses have walls of hardened earth and mud with flat roofs. In Ghodnadi, Pabal, Kendur, Talegaon Dhamdhere, and other large towns, about fifteen per cent of the houses have tiled sloping roofs and about eight per cent are built of stone. A well-to-do landholder owns three to six pair of bullocks, one or two cows and she-buffaloes, and perhaps a few sheep and goats. A poorer landholder will sometimes have only one pair of bullocks. About five per cent of

the husbandmen have to borrow both cattle and field tools. The poorer husbandmen have barely enough to support their families throughout the year and are forced to work as labourers during the slack season. The better off have the usual grain bins in which they store grain for food and seed. About fifty per cent of the cultivating classes are small landholders, about twenty per cent are proprietors with tenants, and about thirty per cent are labourers. Both Malis and Kunbis engage freely in carting when field work is slack. Some Dhangars weave and spin wool, but their chief calling besides agriculture is tending flocks. Labour and the sale of dairy produce supply the wants of many cultivators.

Communications.

Sirur is well off for roads. The high road from Bengal through Aurangabad- and Ahmadnagar to Poona and the coast passes through the sub-division, entering from the north-east close to the town of Sirur and leaving it in the south-west corner close to Koregaon. Two other metalled roads lead one from Sirur to Khed in the west through Pabal, and another also from Sirur to the Bhimthadi sub-division in the south through the Kedgaon railway station. Eight fair weather roads join the chief towns and act as branch communications between the main or metalled roads. No other sub-division in Poona has such facilities for cart traffic. Though the railway does not pass through the sub-division, five stations between Urali and Dhond are easy of access and at no great distance from the southern border. Of five market towns Sirur, Pabal, Talegaon, Kendur, and Kavtha, the chief is Sirur which is also a cattle market. The weekly sales amount to about £30 (Rs.300) worth of grain, £30 (Rs. 300) worth of cattle, and £20 (Rs. 200) of steam and hand woven cloth. The chief industries are the weaving of women's robes and turbans which employs ninety-three and the weaving of blankets which employs eight looms. Most of the produce of the looms is used locally, and the rest goes to Poona.

PLACES

[Except the Poona city and Junnar accounts, this chapter has been prepared chiefly from materials contributed by the late Mr. G. H. Johns, C. S.]

AHIRE.

Ahire, a small village twelve miles north-west of Khed with in 1881 a population of 323, has a Friday weekly market.

AMBEGAON.

Ambegaon on the left bank of the Ghod river, about twenty miles north-west of Khed, is a small village, with in 1881 a population of 877. The village gives its name to the

Ambegaon petty division whose head-quarters are at Ghode. A mile west of Ambegaon the Ghod narrows and flows through a fine rocky gorge. A weekly market is held on Wednesday.

In 1673 the English traveler Fryer passed by Ambegaon on his way to Junnar. Fryer found one Musalman beggar in the town as all the people had fled from a party of Moghal horse. [East India and Persia, 123.]

AMBEGAON.

A'mbegaon, on the old Panvel-Poona road, is a small market town twelve miles southwest of Khadkala, with in 1881 a population of 653. Except during the rains a weekly market is held on Wednesday. Ambegaon was formerly the head-quarters of a subdivision.

ALANDI.

Alandi, on the Poona-Nasik road on the left bank of the Indrayani about twelve miles south of Khed, is a small municipal town, with in 1881 a population of 1754. Alandi is noted as containing the tomb and temple of the great Brahman saint Dnyaneshvar (1271-1300) where a large yearly fair attended by about 50,000 pilgrims is held in November-December.

Temple.

The Poona road crosses the Indrayani at Alandi by a stone bridge which was built in 1820 at a cost of about £8000 (Its. 80,000) by Thakurdas Mohanlal Agarvala a rich banker of Poona. The bridge gives a good view of A'landi with its temples, houses, walls, trees, and gardens. [Lady Falkland's Chow Chow, L 244.] The village contains about 300 houses. The temple of Dnyaneshvar has three chief gateways, Chandulal's, Gaikvad's, and Sindia's, the last facing the bazar being the chief. The temple enclosure has an arched corridor all round, now divided into compartments and used as dwelling houses. The mandap is large and arched and built of stone. It is painted on the inside with scenes and figures from Hindu mythology, and on the outside has the same scenes and figures sculptured in relief.[Oriental Christian Spectator, VII. 46. A part of Dnyanoba's templetomb is said to have been built by the great Vani saint Tukaram who was a great admirer of Dnyanoba.] An unwalled covered way leads from the corridor to the shrine which consists of a vestibule and the tomb-chamber. Over Dnyanoba's tomb is his image three feet high with a silver face and crown and dressed in red clothes. [Oriental Christian Spectator, VII. 46.] Behind the image are figures of Vithoba and Rakhmai. The shrine is said to have been built about 300 years ago by one Ambekar Deshpande and the large mandap by Ramchandra Malhar a minister of Sindia about 1760. The west wall and corridor were built about 1750 by the third Peshwa Balaji Bajirav (1740-1761) and the drum-house or *nagarkhana* in the west or Gaikvad gate was built about 1840 by Ganpatrav Gaikwad at a cost of £200 (Rs. 2000). About 1725 a descendant of Ambekar Deshpande built the east and south wall. The balcony over the east or Chandulal gateway

was built by Chandulal a famous minister of the Nizam. The north corridor was built about 1750 by Sindia and one Kashirav. The balcony or drum-house over the north gateway was built about 1800 at a cost of £800 (Rs. 8000) by Balaji Govind one of Sindia's followers.

Alandi has six other temples of Bahiroba, Malappa, Maruti, Pundlik, Ram, and Vishnu. Pundlik's temple is in the river bed. Another object of worship is a masonry wall which is said to have served Dnyaneshvar as a horse. [See below p. 104.] The temple revenue, amounting to about £200 (Rs. 2000), is enjoyed by the Guravs who correspond to the Badvas of Pandharpur. The Guravs have about twenty-one houses and number about a hundred. Besides the income from pilgrims the temple enjoys a Government cash grant of £108 (Rs. 1080) managed by six administrators who are chosen for life by the people. Pilgrims come on the dark eleventh of every Hindu month, but the chief day is the dark eleventh of *Kartik* or November-December when about 50,000 pilgrims assemble. The camping ground for pilgrims is on the outskirts of the village with good natural drainage.

Municipality.

The municipality was established in 1867 and in 1882-83 had an income of £545 (Rs. 5450) and an expenditure of £522 (Rs. 5220). The chief source of income, £470 10s. (Rs. 4705), is a pilgrim tax at the rate of 3d. (2 as.) a head which gives the number of pilgrims in 1882-83 at 37,640.

History.

Dnyanoba's father was a Deshasth Brahman named Vithoba, who lived at Apegaon on the Godavari near Nasik. In travelling to different holy places Vithoba came to Alandi then called Alkapur. Here a village accountant named Shidhopant gave him his daughter Rakhmai in marriage. Soon after his marriage Vithoba went to Benares and became an ascetic or sanyashi. When Shidhopant heard that his son-in-law had taken to an ascetic's life, he recalled him, reasoned with him, and admitted him to the life of a householder. The village Brahmans, believing it against scripture rules that an ascetic should return to a householder's life, out casted Vithoba who went with his four children, three sons Dnyaneshvar Nivrittinath and Sopandev and a daughter Muktabai, to lay his case before the learned Brahmans of Paithan. The Brahmans would not have admitted the family into caste but for two miracles performed by Dnyaneshvar to showthat they were all four incarnations of Vishnu, Shiv, Brahma, and Lakshmi, and that no expiatory rites were, necessary for their re-admission. The two miracles were endowing a he-buffalo with speech and making him recite Vedic mantras, and inviting in person the ancestors of a man when he was performing their shraddh ceremony. On re-admission Dnyaneshvar returned to Alandi. On the way the Ved-reeiting buffalo died and Dnyaneshvar, giving him the name of Mhasoba, buried him with due rites at Kolvadi a hamlet of Ale village sixteen miles east of Junnar. [At Mhasoba's tomb a fair is still held on the bright eleventh of *Chailra* or March April. See below Ale.] At Alandi Dnyanoba performed his most notable miracle of riding on a wall. Changdev a reputed saint came to meet Dnyaneshvar riding through the air on a tiger and using a snake for his whip. Dnyaneshvar, not wishing to be outdone by Changdev, went to the town wall and striding on it caused a part of it to move forward and meet Changdev. The wall is still shown surrounding a mud temple of Vithoba on the river bank.

Dnyaneshvar was born in 1272 (*Shak* 1194) and is said to have died in his twenty-eighth year at Alandi in 1300. In 1290 he wrote at Nevasa in Ahmadnagar his greatest work called after his name Dnyaneshvari, a Marathi treatise in verse on the ogony and metaphysics based upon the well known Bhagvadgita. A book on Dnyaneshvar and other saints called *Bhaktivijaya* was written by Mahipati about 1775.

ALE.

A'le, a small market town sixteen miles east of Junnar, with in 1881 a population of 3397, was transferred by His Highness Holkar to the British Government. A weekly market is held on Friday,. In Kolvadi a hamlet of Ale a yearly fair attended by 1000 to 1500 people is held on the bright eleventh of *Chaitra* or March-April in honour of Mhasoba or the buffalo-god. The local account of the origin of the fair is that the great saint Dnyanoba (1272-1300) buried hero a buffalo-god whom he had taught the Vedas and raised a *samadhi* or tomb on the spot. A shrine was afterwards built and a hall added but never completed. In 1827 Captain dunes notices it as belonging to Holkar, with 300 houses, four shops, wells, and a temple of Maruti. [Itinerary, 22.]

ANE.

A'ne, at the head of the Ane pass twenty-five miles east of Junnar, is a *dumala* or two-owned village, with in 1881 a population of 1916, and a weekly market on Wednesday. A well made road passes from Ane ten miles south-west to Belhe.

AVSARI BUDRUKH.

Avsari Budrukh. is a small town fifteen miles north-east of Khed, with in 1881 a population of 2778. The town was the headquarters of a petty division till 1862 when the petty division was abolished. The petty divisional office, which is just outside the west entrance of the town, is now used as a school. Within and close to the west entrance is a temple of Bhairav built about a hundred years ago by one Shankarshet a Lingayat Vani. The hall, which is entered through a broad archway, is elaborately painted inside with scenes from Hindu mythology. The outside of the temple which has several figures on the roof and spire, notably a Ganpati above the entrance arch, is every year re-painted in gorgeous colours. Facing the entrance are two fine lamp-pillars covered with brackets for lights and ending in square capitals adorned underneath with sculptured foliage. Beyond the lamp-pillar is a drum-house or *nagarkhana* on a stone canopy which contains a stone horse on a pedestal.

BARAMATI.

Ba'ra'mati, north latitude 18° 10' and east longitude 74° 39', on the Karha about fifty miles south-east of Poona, is a municipal town and the head-quarters of a petty division, with in 1881 a population of 5272. The 1872 census showed a population of 4975, of whom 4445 were Hindus and 530 Musalmans. The 1881 census gave an increase of 297 or 5272 of whom 4773 were Hindus and 499 Musalmans. Besides the petty divisional revenue and police offices Baramati has a municipality, a dispensary, and a post-office. The municipality, which was established in 1865, had in 1882-83 an income of £584 (Rs.5840) and an expenditure of £466 (Rs. 4660). The dispensary was established in 1873. In 1882-88 it treated thirteen in-patients and 4081 out-patients at a cost of £106 6s. (Rs. 1063). In 1637 Baramati was included in the territory belonging to Shahaji the father of Shivaji. [Grant Duff's Marathas, 56.] Baramati was the residence of the Naik banker family which intermarried with the Peshwas and of the famous Marathi poet Moropant, a Karhada Brahman, who flourished in the eighteenth century (1729-1794). In 1792 Captain Moor, afterwards the author of the Hindu Pantheon, described Bararmati as a large respectable town with strong fortifications. The Karha river divided the town and the best part was protected by a high wall. About a mile to the east was a tract of rich garden land. [Moor's Narrative, 344 - 315.] In 1802 Fattehsing Mane the general of Yashvantrav Holkar attacked the Peshwa's camp at Baramati and routed his army taking all the artillery. [Grant Duff's Marathas, 557.] General Wellesley camped at Baramati on the 18th of April 1803 on his way from Seringapatam to Poona to seat Bajirav Peshwa on the throne. From Baramati, to save it from destruction, he made the famous march to Poona of sixty miles in thirty-two hours. [Despatches, I. 166.]

BEDSA.

Bedsa, a small village of 220 people in Maval about five miles south-west of Khadkala station on the Peninsula railway, gives its name to a group of two caves of about the first century A.D. The caves lie in the Supati hills, which rise above Bedsa village, at a height of about 300 feet above the plain and 2250 feet above sea level.

Caves

The caves may be visited from Karle or Khadkala. From Karle the way to the caves leads south-east across the railway by a very rough rocky track about six miles east to Pimpalgaon and from Khadkala a walk round the west base of a spur leads about two miles to Pimpalgaon. From Pimpalgaon a footpath leads about 550 feet up a steep hill side to the crest of a ravine at a small temple of Vaghoba. The smoothly topped hill on the right of the temple with the peaked central head is Bhatras and the heavy ragged cliff on the left is Khurva. From the temple the path leads along a rough terrace across some stream beds and up a short steep climb to the caves.

The two chief caves are a chapel or *chaitya* and a dwelling cave or *layana* both of them with very clear traces of being copied from wooden buildings. The chapel is approached by a narrow forty feet passage between two blocks of rock about eighteen feet high. [The long passage in front is left to get sufficiently back to get the necessary height for the front or facade. The blocks on either side hide the greater part of the front. Fergusson and

Burgess' Cave Temples, 229.] A passage five feet wide has been cleared between the blocks and the front of two massive octagonal columns and two demi columns whichsupport the entablature at a height of about twenty-five feet. Their bases are of the *lota* or water-vessel pattern from which rise shafts slightly tapering and surmounted by an ogee or fluted capital of the Persepolitan type, [The pillar and pilaster to the west are much closer fluted and more like Ashok pillars than the pillar and pilaster to the east. The top of the pillar below the capital is clearly Assyrian.] grooved vertically and supporting a fluted torus in a square frame over which lie four thin square plates each projecting over the one below. On each face of the uppermost plate crouch elephants horses and bulls with beautiful and well proportioned groups of men and women riding over them. On the pilaster to the right of the entrance are two horses with a man and woman seated on them. The whole is finely carved especially the mouth and nostrils of the horses. The woman is seated astraddle on the horse, her left hand is raised and her right hand holds her hair. She has large square earrings, a bracelet near the wrist and another near the elbow, and a double anklet, the lower with bells. The man has a globe-shaped ornament on his head. The pillar to the right of the entrance has, on the east face of the capital, two seated or kneeling horses back to back. On the south horse sits a woman, her left hand on the horse's neck, her right fist closed and shaken at the man. The woman wears a square earring a necklace and an anklet. The man faces east and has his left hand turned back clutching a curl of the woman's hair. His right hand is on the horse's neck. He wears a necklace, which is a row of octagonal stones, and on his right arm are four bracelets and on his left two. His waistcloth is folded in bands which hang down the side of the horse. The horse has neither saddle nor bridle. The left pillar has, on the east face, two seated elephants with a woman on the north and a man on the south, The woman is seated on the elephant and is pulled back by the man who draws her by the wrist. The left arm is bent, the hand resting on the elephant's head. The man's left hand drags the woman's right hand and his right hand is broken. The man has no hair on his face. The elephants are very finely carved. They have no tusks which were either of wood or ivory which has dropped away leaving holes. The left or south pilaster has a horse on the east and; a bull on the west. On the bull, which is finely carved, is a seated woman with her left hand on the bull's neck and her right hand on the man's shoulder. The man looks east; his left hand is on his left thigh and his right hand on the horse's neck.

The west or inner face of the right pillar has two elephants. On the north elephant is a woman seated bare to the waist. She weans heavy square earrings, a large folded necklace hanging to the breasts, a waistband, and an anklet. Her right hand rests on the elephant's temple and her left hand clutches the man's turban. On the south, that is the left, elephant, to one looking out of the cave, is a woman in front and a man behind, both looking west that is facing the relic-shrine. The woman has her left hand near the elephant's ear and her right hand on the man's neck. The man's right hand holds the woman's left arm to keep her from dragging off his turban. His left hand is near the waist of the woman.

The west or inner face of the left pillar has two horses. A woman is seated on the north horse and a man on the south horse. The woman's left hand rests on her hip and her right hand is raised above the horse's neck. The man's left hand is on the horse's neck; his right hand catches the woman's hair. Comparing the inner faces of the two pillars, on the left

pillar the man tries to carry away the woman and on the right pillar the woman tries to take away the man.

The veranda or porch within the pillars is nearly twelve feet wide and in front 30 '2" long with two benched cells projecting somewhat into it from the back corners and one in the right end in front, with, over the door, an inscription in one line recording:

Insciption 1.

'The gift of Pushyanaka, son of A'nanda Sethi, from Na'sik.'

The corresponding cell in the opposite end is only begun. Along the base of the walls and from the levels of the lintels of the cell-doors upwards the porch walls are covered with the rail pattern on flat and curved surfaces, intermixed with the *chaitya* window ornaments but without any animal or human representations. This and the entire absence of any figure of Buddha show the early or Hinayana style of the caves, probably of about the first century after Christ.

The door jambs slant slightly inwards as do also the inside pillars, another mark of its early age. The interior is 45' 4" long by 21' wide. The gallery in the sill of the great window extends 3' 7" into the cave, which, besides the two irregular pillars in front, has twenty-four octagonal shafts, 10' 3" high, separating the nave from the side aisles 3' 6" wide. Over the pillars is a fillet 4" deep and then the triforium about four feet high. All the wood work has disappeared though the pegs that kept it in its place may still be seen. [The wood work would seem to have disappeared within the last twenty years. In 1844 (Jour. Bom. Br. Roy. As. Soc. I. 438) Westergaard describes the cave as ribbed, and about 1861 a writer in the Oriental Christian Spectator (X. 17-18) found fragments of timber lying on the floor.] On the pillars, as late as 1861, could be clearly traced portions of old painting chiefly of Buddha with attendants; but the caves have since been whitewashed and no trace of the painting is left. [About 1861 the roof had traces of indistinct paintings. The pillars were richly and elaborately painted on a ground apparently of lime. The proportions and expression of the figures was admirable. On one side of the pillars was a figure holding a sword and on an her a figure with a square white fan. On another pillar was traceable part of a cornice very minutely painted with flowers and birds, one of the birds as fresh and perfect as if fresh painted. Oriental Christian Spectator, 111. 17.] On five of the right pillars are carved Buddhist symbols. The sixth pillar from the entrance has, about ten feet from the ground, a central and two side lotus symbols. The seventh pillar has a central wheel of the law and side flowers. The eighth pillar has a central symbol with, above it, a Buddhist trident and below two lotuses. The ninth pillar has two taurus signs above and two lotus signs below. The tenth pillar has a sun-like circle for the wheel and trident and a lotus.

The *daghoba* or relic shrine has a broad fillet of rail ornament at the base and top of the cylinder from which rises a second and shorter cylinder also surrounded above with the rail ornament. The box of the capital is small and is surmounted by a very heavy capital in which, out of a lotus bud, stands the wooden shaft of the umbrella. The top of the

umbrella has disappeared. The relic shrine is daubed in front with redlead and worshipped as Dharmaraj's *dhera* or resting-place.

Leaving the chapel and passing a well near the entrance about twenty paces off is a large unfinished cell with in its back a water cistern. Over the water cistern is an inscription in three lines of tolerably clear letters which records:

Inscription 2.

"The religious gift of Maha'bhoja's daughter Sa'madinika, the Maha'devi Maha'rathini and wife of A'padevanaka.'

Close by the unfinished cell is cave II. a *vihara* or dwelling cave but unique in design with an arched roof and round at the back like a chapel. Outside, one on each side of the entrance, are two benched cells. The entrance is 17' 3" wide with a thin pilaster 3' 5 broad on each side. Within the entrance the cave is 18' 2" wide and 32' 5" deep to the back of the apse and has eleven cells all with benches or beds. The cell doors have arches joined by a string course of rail pattern and, in a line with the finiale of the arches, is another similar course. The doors have plain architraves and outside each architrave a pilaster. In the walls between the doors are carved false-grated windows. The whole cave has been plastered and was probably painted, but it is now overlaid with a coating of smoke. In the back wall of the cave in a niche is a figure of the goddess Yemmai thickly covered with red paint. A *sati* stone lies against the wall, a little to the right.

Beyond this and under steps leading up to the left is a small cell and in the stream beyond is a small open cistern (7' x 3' 6") with sockets cut in the rock. About thirty feet beyond is another plain room about 14' 8" square with a door seven feet wide.

On the rock behind a relic shrine or *daghoba* a short distance from Cave 1. is a weather worn inscription in two lines which records:

Inscription 3.

The stupa of Gobhuti, native of Ma'rakuda, an A'ranaka (and) Pedapa'tika. Caused to be made by Asa'lamita Bhata, inhabitant of...........

BELHE.

Belhe, twenty-one miles south-east of Junnar, is a large village with in 1881 a population of 2816 and a weekly market on Mondays. Belhe belongs to a Moghal family who held a high position in Junnar in the seventeenth century and who still enjoy the title of Nawabs of Belhe. They have married with the Nawabs of Surat and the present proprietor is the son-in-law of Jafar Ali the late Nawab of Surat. They have a large mansion in Junnar town which is entered by a fine gateway. [Details are given below under Junnar,] To the south-east of Belhe, near the Musalman burial-ground, is a Hemadpanti well. The well is about twenty yards square and is entered by two opposite flights of ten steps each. The

walls have eighteen canopied niches four each on the sides with steps and five each on the other two sides. The niches (3' x 1' 6" x 1) are square headed with carved side pillars and a finial consisting of a canopy knobbed at the top. The south wall has a worn-out inscription. Close by the well is a Pir's tomb where a yearly fair or *urus*, attended by about 1000 people, is held on the second day of the bright half of *Chaitra* or March-April.

BHAJA.

Caves.

Bha'ja, a small village of 291 people in Maval about seven miles south-west of Khadkala and about two miles south of Karle railway station, has a group of about eighteen early Buddhist caves of about the second and first century B.C. A rough road leads about two miles south of the Karle rest-house to Bhaja. The caves are about 400 feet above the village in the west face of a steep hill.

Beginning from the north the first is apparently a natural cavern thirty feet long and slightly enlarged. The next ten are plain cells. Cave VI. is an irregular cell much ruined and half filled up. The hall is irregular about fourteen feet square with two cells on each side and three in the back wall with *chaitya* window ornaments over all the cell doors. Over the right side cell door in the back wall is inscription one recording:

Inscription 1.

'The gift of Ba'dha' (Bodhi) a ploughman's wife."

On the back wall of cave IX. is a frieze projecting 2' 2" with, four *chaitya* arches joined by the rail pattern. In front of the cave was a veranda which seems to have had pillars with animal capitals. A fragment of the base of a pillar is left as also a broken capital with animal figures upon it.

Cave XII.

Cave XII. the *chaitya* or chapel is the best in the group, one of the most interesting in India, and, according to Dr. Burgess, one of the most important to be found anywhere for the history of cave architecture. The cave is fifty-nine feet long by about twenty-nine feet wide with a semicircular apse at the back and having an aisle 3' 5" wide separated from the nave by twenty-seven plain octagonal shafts 11' 4" high. The pillars rake inwards about 5" on each side, so that the nave is 15' 6" wide at the tops of the pillars and 16' 4" at their bases. The *daghoba* or relic shrine is eleven feet in diameter at the floor and the cylinder or drum is four feet high. The dome is six feet high and the box upon it is two storeyed, the upper box being hewn out 1' 7" square inside with a hole in the bottom 1' 8" deep and 7" in diameter. The upper part of the box or capital is of a separate stone and hewn out, showing clearly that it held some relic. On four of the pillars are carved in low relief seven ornaments or Buddhist symbols. On the left of the seventh pillar is a symbol

formed of four tridents round a centre which perhaps contained a fan with buds and leaves at the corners. On the eighth pillar, on the right side are two flowers and what looks like a fan and on the left side a posy of holy flowers.

Cave X V.

The roof is arched, the arch rising from a narrow ledge over the triforium 7' 5" above the tops of the pillars and 26' 5" high from the floor. The roof is ribbed inside with teak girders the first four of which, and parts of some of the others, have given way or been pulled down. The front must have been entirely of wood and four holes are made in the floor showing the position of the chief uprights. There are also mortices cut in the rock showing where one of the chief cross beams must have been placed, probably to secure the lattice work in the upper part of the window. The front of the great arch is full of pin holes in three rows, about 170 in all, showing beyond doubt that some wooden, probably ornamental, facing covered the whole of the front. The figures on the front are a female figure high up on the left much weatherworn but with a beaded belt about the lions; two half figures looking out at a window in the projecting side to the right of the great arch and on the same side the heads of two others in two small compartments and on a level with the top of the arch. By the side of Cave XII, but with the line of its front coming out to the south at a small angle, is Cave XIII the front quite gone and probably of wood. The cave (30' X 14' 6") has a cell in each of the back corners and three in the back wall. Each cell has a latticed window. The left cell has a fastening on the door as if for a lock or bolt. The right cell has an arched door and a stone bench. Of the back wall cells two on the sides have a single bench, and the middle cell has two with a small recess under each. Over the doors of all the cells is the *chaitya* arch joined by a frieze of rail pattern. Over the front of the cave are ornamental arches and a double course of rail pattern. Close to Cave XIII., and facing a little more to the north, is cave XIV. (6' 8" x 25' 6") with one cell at the back and three on each side. The front cells have double beds with a recess under each; the second on the left has no bed but a square window and the third on the right has no bed but leads into an inner cell with a stone bench. Cave XV is above Cave XIII and with Cave XVI is reached by a stair to the south of Cave XIV. It is a small dwelling cave (12' 6" x 10') with a bench on the right and two semicircular niches 2' 8" wide with arched tops surmounted by the *chaitya* arch. At the back are two benched cells. The front wall is gone; the terrace in front was about five feet wide and probably, as shown by holes in the roof, framed in wood work and projecting forwards. The front above this cave and cave XVI is carved with thin *chaitya* arches and the rail pattern. Cave XVII reached by a descent from caves XV and XVI is a small dwelling cave (18' 6" x 12' 6") with three cells at the back and two at the right, one of them with a bench. There is also a bench in the left end of the hall and an irregular recess or cell. On the right, near the door of the second cell, is inscription two in two lines which records:

Inscription 2.

'The gift of a cell from Na'dasava, a Na'ya of Bhogavati.'

Near the cave are two wells in a recess and over them is inscription three in two lines which records:

'The religious gift of a cistern by Vinhudata, son of Kosiki a great warrior.'

At some distance along; the scarp is a large excavation containing a group of fourteen relic shrines or *daghobas* of various sizes cut in the rock. As their inscriptions show, they are the tombs or *thupos* of monks. All have the Buddhist rail pattern round the upper part of the drum. Five of them are under the rock and vary in diameter from 6' 3" to 4' 8" and of these two in front have the relic box only on the dome while the three behind them have also, heavy capitals, the largest on the left joined to the roof by the stone shaft of the umbrella, while, over the other two, the circle of the umbrella is carved on the roof with a hole in the centre over a corresponding hole in the capital, evidently to insert a wooden rod. Of the nine *daghobas* outside the rock roof, the first to the north has a handsome capital 3' 8" high and very elaborately carved. As most of the other *daghobas* are broken, it cannot be said how they were finished except that the eighth and possibly others were of the plain box form without any cornice. In four of the capitals under the roof are holes on the upper surface as if for placing relics and two have a depression round the edge of the hole as if for a closely fitting cover.

Inscriptions 4-8.

On the second *daghoba*, going from north-east to south-west, in the front row is a weather-worn inscription in one line recording:

'The Thupo of the venerable reverend Dhamagiri.'

On the base of the third *daghoba* is inscription five in one line recording.

'The Thupo of the venerable reverend Ainpikinaka.'

On the base of the fourth daghoba is inscription six in one very indistinct line recording:

'The Thupo of the venerable reverend Sanghadina.'

On the capital of one of the *daghobas* under the rock is inscription seven in one line recording:

'The venerable reverend.'

There is an eighth inscription much weather-worn and difficult to read on the dome of the large relic shrine which stands first in the front row.

Farther along the hill scarp is a small chamber, with a cell at the right end, much filled up but with a frieze, ornamented by female figures and relic shrines in high relief, supporting a moulding with relic shrines in half relief and with an arched roof only half of which remains. On the wall are some curious sculptures. Farther along the hill scarp, under the first waterfall, is a small empty round cell; under the second is a large square room with three cells at each side, partly filled and much ruined; under the third waterfall is a small round cell with a relic shrine.

In 1879 a very old and most interesting cave was discovered in the Bhaja scarp further to the east. When first found the cave was filled nearly to the roof of the veranda with mud and earth. The veranda pillars and the sides of the entrance doors are broken away. The cave faces north and is a small dwelling cave with a somewhat irregular hall (16' 6" X 17' 6"). There are two cells in the inner wall one of them with a stone bed and two in the east wall. The cave has three other cells, a large cell with a stone bed at one end of the veranda and two smaller with benches at the other end. At one end is a pillar and pilaster with bell and pot-shaped capitals. The pillar and pilaster are surmounted by fabulous animals, human female busts with the bodies of cows. The cave has some remarkable sculptures in the hall and veranda.

On the left wall of the cave is a standing male figure (5' 9" x 2' 8") with lips compressed, no face hair, and feet carved as if walking towards the right. The legs are crossed, the right leg brought behind the left leg. The left hand holds the hilt of a heavy thick dagger that is tied on the left hip. The right hand grasps a spear. The headdress is curious and heavy. The hair is rolled into a big dome. There are heavy earrings with five rings and a heavy double necklace. On the upper arms is a broad belt with pointed side plaits. On the lower arm are five bracelets. The figure wears a waistcloth. Over the right shoulder is the sacred thread. The feet are bare. The dagger on the left hip is heavy and broad-bladed; the spear has a head like a modern spear, and a knobbed head on the ground like a mace. The other figure (3' 7" x 1' 6") on the left wall is also standing. It holds a spear in the right hand and the left hand rests on the waistband. A shoulder cloth is thrown over the left shoulder. The hair is tied in a dome which is not properly finished. In the back wall of the cave below is a small figure holding up the seat and on the right side is another small figure.

Veranda Sculptures.

In the left end of the veranda the small central pillar has a capital carved into figures, a horse below and a woman from the waist up. The right hand holds up the roof. The figure has a curious head dress as if the hair was done up with wreaths of pearl, and big earrings, double necklace, and hanging stomacher. The right corner of the capital is another female centaur with triple and fivefold bracelets. Between the earrings is a female head. The figures at the side of the capitals are like the sphinx in the Karle chapel cave. In the corner are more centaurs male and female with different head-dresses and not holding up the roof.

In the front wall on the left is a standing male figure with the hair tied into a great domed headdress. He holds a double spear in his left hand which is held to his breast and his right hand rests on the handle of a broadbladed *kukari* like dagger. Below the sheath of the dagger show the ends of the double spear. The case of the dagger is tied on with a

cloth. On his upper arms great ornaments stretch from near the elbow to the shoulder, In the cars are huge earrings and round the neck is an elaborately carved necklace. Many threads are gathered together with a plate or *madalia*. Above is a double necklace one of them with plates, the upper with beads like an amulet. The earrings are very heavy like a snake with seven coils. The face is broken. The figure wears elaborate bracelets in four sets of four rows each fastened into plates. A shoulder cloth is drawn over the left shoulder and round the waist is a thick waistcloth with many folds. There seem to be other skirts like a kilt.

The middle figure is a man with much bushy headdress different from the last. He wears a necklace of big beads and below at the breast a double necklace. He wears a shoulder cloth or perhaps a sacred thread. His right hand held a dagger of which the case remains. Below a waistcloth falls nearly to the right ankle and to the left knee. His left hand held two spears of which the lower ends remain.

On the right are three figures; a standing male with a headdress like the first figure, the hair seeming to fall down the right shoulder. The figure wears a big hanging necklace; the earrings are different from the first figure but broken. There is a third necklace like a rich band, one side shown on the right chest and the other aide showing on the left. Behind the back is a guiver stocked with arrows. In his right hand is a bow and his left hand is on a dagger tied to his left hip. His feet are bare. His waistcloth hangs in heavy full folds. To the right of this figure is a window of stone lattice work and below the window to the right are a male (1' 7" x 1' 2") and a female demon (2' 2" x 1 2"). The female demon is big and fat with staring eyes and a tremendous mouthful of teeth; in her raised right hand is a hammer. The male demon to the right is smaller and in trouble, his right hand being eaten by some large animal with crocodile-like jaws. Above the male demon is a man riding a horse, his feet in stirrups. He wears a necklace of great rows of beads. The horse has a jaunty or *chhoga* headdress. The rider holds the reins in his right hand and a spear in the left. His right foot is in a stirrup. A demon holds up the left hind and front feet of the horse. Below the horse's belly is a man like a king. The group seems to represent a demon carrying off a king. On the right a king stands in a chariot like a Greek car drawn by four horses. He wears a double necklace like flowers, and a handsome headdress. With him in the chariot are two women, one behind him holds an umbrella the other in front has a flywhisk. They have rich ornaments and waistbands. The horses are treading the female demon who lies facedown. In the back ground is a chief. To the right is another curious group. Below, near the lower left corner, is a chief seated one leg on the seat, the other hanging down: and close by on the very left is a sacred tree hung with garlands and rail at the foot. Close to the king's left a woman brings a spittoon and a water-pot; behind is a woman with a flywhisk and a man. Below is a group, a man playing a stringed instrument and a woman dancing. To the right of the tree is some wild animal perhaps a hippopotamus and below is a fallen bullock and further to the right a great crocodile's head. Above a woman with a horse's head clutches the shoulder cloth of a man on the left and is carrying him off. A little above are two small elephant-like heads, a tiger eating a deer or a cow, and a small elephant gnawing at the foot of a big elephant, the central figure in the group. Above a small elephant kills a tiger and over it is a tree perhaps the Acacia cirisa. Higher to the left, above the seated king, is a sacred tree with

many male and female figures on it, the men with headdresses like peaked nightcaps. Above, on the left, a male figure floats down, and from the right comes up a man with a dagger in his right hand. On the large elephant which forms the central figure in the group rides a great king. Round his neck great garlands have been hung, which fall to his feet, and his arms, nearly up to the elbow, are encircled with bracelets of flowers. His right hand holds the elephant goad and his left hand is raised to his chest and grasps the flower garland. Behind him sits a small male figure with a coat and a striped waistcloth and a cloth wound round his face under the chin. In his hands he holds a double stick and a flag with a Buddhist trident above it. There is a man behind the elephant and something else like a tree. The elephant moves along carrying in his trunk an acacia tree torn up by the root.

Proposed Moral.

The group on the end wall are the demons attacking the king and beating him. Then on the side wall comes Lord Buddha in his chariot and crushes, the demons. The big group seems to show the state of things before Buddha taught. The kings enjoy themselves with playing-men and dancing-women and all the animal kingdom is at strife one beast preying on another. Above, Buddha, the peaceful conqueror, unarmed and adorned with flowers, brings all to order. [Compare Fergusson and Burgess' Cave Temples, 513 523.]

On the inner wall above the door is a frieze of alternate topes and figures holding up the roof. The topes are somewhat like the Amravati tope. On the left side walls under the centaurs is a frieze close to the ground. In the left corner is a bullock, then a winged horse or bullock, next a standing man with his hands raised above his head. Then comes a chief-like or important personage well dressed on a horse his bare feet in stirrups. Then follow three men one above the other, then a man with both his hands raised over his head. Then two bulls goring a fallen male figure. The headdresses in the cave are like those in the Bharhut Stupa in the Central Provinces about a hundred miles north-east of Jabalpur, though the ornaments of the Stupa are not so old.

From the position of the cave in a place not nearly so well suited for a cave as the big one (XII) it looks as if Cave XII was first made.

BHAVSARI.

Bhavsari or **Bhosari**, also known as Bhojpur, is the first stage on the Nasik road about eight miles north of Poona. It stands on slightly rising ground in a bare rocky upland, perhaps about a hundred feet above the level of Poona. The village is of considerable size with small houses and to the north a large pond. The Poona-Nasik road passes north and south about a hundred yards to the east of the village. The place is remarkable for a number of large rude stone enclosures to the east south and west of the village.

Rude Stone Enclosures.

In the space between the Poona-Nasik road and the village, the foundations of a wall of large rough stones enclose a large plot of ground. According to the villagers this was the village *kot* or citadel, but the example of Khandoba's enclosure, about 300 yards to the south-east, and of other enclosures to the south and the south-west of the village shows that the space enclosed by this wall was set apart for funeral or other religious purposes. Inside of the line of the enclosing wall are the remains of three mounds from three or four to about seven feet high. The mound to the east, close' to the road, is known as Kalkai's temple. It is about three or four feet high and about twelve paces square and is covered with stones most or them rough but one hollowed as if for a conduit or water-pipe. In the south-west of the enclosure is a mound about six feet high which is known as the mosque and seems to have traces of modern building; and a few paces to the north is a lower mound, two or three feet high, which looks like an old burial mound.

A few paces to the south-west of the mosque heap, leaning against a Wall, is a fairly preserved battle or hero stone. It has a funeral urn at the top and below five panels of carved figures. In the lowest panel at the foot a man lies dead and above his body are three cows showing that the hero of the stone lost his life in a cattle raid. In the next panel on the visitor's left a man with a spear fights two men on the right with shields and swords. In the panel above is Shiv's heaven with the hero in the centre and apsaras or heavenly damsels dancing at the sides. In the top panel the hero in heaven worships the ling. To the west of a rest-house, a little further to the south-west, are two standing stones one of them 8' 6" x 3', and about twenty-five paces further west are two more about seven feet high. Passing northwards by the east of the village and along the south bank are several small shrines some of them of large rough stones. On a bank in the north-west corner of the pond are three battle or hero stones. The stone to the east, which measures 3' 10" x 1'7" X 1', is covered with redlead. It has an urn on the top and three panels of carving below. On a band of stone about two inches broad, below the urn, are letters of the tenth century but too worn to be read. Below the figures are clearly cut and well proportioned. In the lowest panel are four cones and a prostrate human figure; in the panels above a man on foot with bow and arrows fights three footmen armed with spears and bows and arrows and three horsemen behind. In the top panel on the left a man and woman worship something like a water-pot and on the right another man worships. The carvings on the two other battle-stones are too broken to make out. To the west of the pond and on the northern bank are some patches of ground thickly strewn with boulders. But as far as they were examined they showed no signs of artificial arrangement. Returning along the south bank of the pond and passing about 150 yards along the road on the right close to the road a complete wall or row of rough stones, several of them measuring about four feet by three feet and six inches thick, encloses a plot of ground about thirty-five feet square, the ground within the enclosure being no higher than on the outside of it. Near the centre is a grave of dressed stones apparently more modern than the enclosing wall. About two hundred yards to the southeast is a small whitewashed shrine of Kandoba, a form of Krishna who, on the dark eighth of Shravan in August-September, enters into his worshippers and makes them dance. To the east is a line of rude graves belonging to Kandoba's worshippers most of whom seem to be Chambhars and Mhars. The ground to the south of this shrine and west nearly to the road is strewn with lines and enclosing walls of big stones, sometimes a small circle surrounded by a

large square and with an occasionally solitary standing stone, and here and there a small built shrine. Close to Kandoba's temple, a little to the south, is a small shrine made of four big stones, two side, a back, and a roof. It is open to the east and measures 5' 7" long by 3' 6" broad and 6' high. At the back are about twelve small round stones sacred to the goddess Satvai. The shrine is apparently modem but is interesting from its likeness to some of the rude stone tombs and shrines which have been found in the South Deccan and on the Malabar coast. A few paces to the south is an upright pillar-like stone 4' 3" out of the ground and with faces about eighteen inches broad. Close to this standing stone seven large blocks of trap enclose a circle about twelve feet in diameter. Another of the enclosures is about thirty-eight feet square. Passing several more enclosures, some of them with small modern shrines to Mariai or Ghoda Satvai, about 200 yards to the southeast, is one of the best preserved of the enclosures. It measures about 170 feet east and west by 110 feet north and south. The wall is about four feet broad of undressed stones, many of them roughly round and a foot or two in diameter, and at intervals larger stones about three or four feet high and three feet broad. Near the middle of the east face is a gate with the large stones as pillars. They are about five feet apart and stand about six feet out of the ground with four faces varying in breadth from a foot to a foot and a half. About six yards to the west of this door and about sixteen feet apart are two low mounds with plinths of great rough stones (4' x 3' and 3' 6" X 2') piled in three or four layers raised inside two or three feet above the outside level. The mound on the right is roughly fifteen feet square with stones as much as 4' 5" by 3'9" and heaped inside with earth and a few stones about two feet higher on the outer level. The centre of this mound was opened and dug about four feet deep, two through earth and two through hard yellow murum mixed with lime nodules to rock. Near the level of the ground there was a piece of teakwood about 18" long, rough and like a large tent peg. A fragment of a green glass bracelet, appearing the same as the present glass bracelets, was the only article found. The left-hand mound was also opened and dug about five feet deep. The part above the surface of the ground was full of large stones. Below the surface, for about 18" in the centre, it was soft earth and murum an if it had been dug into before. There were also several lime nodules the same as in the right-hand mound. Among the *murum* and lime nodules were found pieces of bones some of the teeth. There were no traces of pottery. Another foot deeper was rock. About three paces to the north of the right-hand mound there seem to be traces of a mound but the middle has been removed and in its place a roughly square building is set up as a tomb. About four paces towards the north wall is a small square about five feet of stones with a big stone in the centre like a rough tomb. About nine paces west of the two mounds, near the centre of the enclosure, is the base of a mound or grave about eight feet square. The base stones are still in their place, the rest are piled into a cairn. The top of the cairn is hollow and in the hollow is a slab about 18" by 6" with a human figure roughly carved on it and covered with red lead. It is a spirit or vir who comes into men. About a yard further west, on a raised platform about five feet square, is a stone carved with two pair of feet. There is also a seated image with the legs crossed and the hands in front of the chest as if in the teaching position. This is Hegadi Pradhan, the minister of Khandoba, whose: platform stands to the east of Khandoba's temple as the Nandi platform stands to the east of Mahadev's temple. About six paces to the south is a small tomb about six feet square. About nine paces to the south is another square (44'x 15'), an outside line of stones about four feet broad and the inside level with

the ground and bare. The centre was opened and dug about two feet below ground level but nothing was found. It seems to be the site of a temple or shrine rather than a burial mound. About fourteen paces west of the central pair of tombs is a shrine of Khandoba about twelve feet square with, in front to the east, a space about fifteen feet square enclosed by a wall of rough stones about three feet high. The shrine is built on an old mound which seems to have been round or oval. On each side of the shrine-door are fragments of two old carved pillars. The lintel and side posts of the door are also old and carved with two or three rows of elegant but much worn tracing. The dome of the shrine, though modern, is in the cross-corner style. Near the centre of the floor is a small ling and near it a small bull. In the back wall is a centre figure of Khandoba with Banai on the visitor's right and Mhalsa on the visitor's left. There are a few other figures of attendants. Passing across the main road to the south of the village stretch low rolling hillocks blackened with large boulders. A large number of the boulders have been broken by Beldars and carried away, but many remain. The arrangement is confused and the lines are irregular and with many gaps, but there is enough to show that almost all of them are arranged in walls enclosing large spaces, in many cases with inner enclosures, and in a few of the inner enclosures some large pointed standing stones and low mounds inside. One of these mounds was opened and dug through earth and murum about three feet below the surface to rock but nothing was found. Still these stones are in great numbers and of large size (3' x 3' or 4' x 2') and almost all the lines of stones bear traces of arrangement and apparently belong to some old burial monuments. Low mounds stretch to the westmost of them, topped with a thick cluster of boulders generally with one or two large pointed stones. Fresh earth-marks on some of these stones show that the circles have been lately repaired or completed and that they are used as cattle-pens or stackyards. Others seem to be old and are arranged round a shrine or a rude painted stone. On the top of one hillock is an enclosure of big stones thirteen paces by ten, with an inner enclosure of smaller stones (12' x 7') with a long low stone at the west end smeared with redlead and worshipped as Mhasoba. About fifty paces to the north is one of the quaint shrines made of four stones, side and back stones and a flat roof resting on them. Inside is a stone about 18" high daubed with red paint, roughly shaped as the home of Chedoba. About a quarter of a mile further west beyond a belt of rich lowland are more boulderstrewn knolls. The stones are arranged in large enclosures containing small circles or squares many of them marked by some specially large standing stones. They stretch to the west and to the northwest for many hundred yards. According to one of the villagers they are the sites of the houses when the village was a city in the times of the Gavli kings. But they are too irregular and the enclosures intersect each other too much to be either the sites of houses or cattle-pens. On another knoll about 200 yards north, with an enclosing circle, is a small stone temple of Mahadev with a fragment of a pillar near the gate of the enclosure wall and inside of the enclosure an old well-carved but broken bull. A few paces east of the temple enclosure among some tombs is a curious shrine, a large flat stone resting on three large pointed stones. It is said to be a tomb. About half a mile to the north-east of the village are several low hillocks strewn with boulders. At a distance they look much like the boulder-covered hillocks near the village, but examination shows that the stones are in their natural position, apparently the ruins of a weatherworn knoll. Though the stones are of much the same form and size as those nearer the village, unlike them they show no signs of being picked out, arranged, or set in the ground.

As far as they have been examined none of the stones in these mounds, lines, or walls have any writing or any other sign of the chisel. The discovery of pieces of bones in one of the mounds supports the view that these circles and heaps of stones and the solitary standing stones are funeral monuments. Without letters or the discovery of further relics it is impossible, even within wide limits, to fix the age of these monuments. There seems no reason to doubt that they are old, certainly older than the Musalmans, and probably older than the Silaharas or the Yadavs (850-1310) because the carving of battle-stones was the form of monument which was then in fashion. These monuments were almost certainly raised by rude people in honour of the dead. From the great number of the enclosures this would seem to have been a favourite place for commemorating the dead. And the absence of any signs of a mound in many cases and the want of any relics in several of the mounds suggest that some of these monuments are empty tombs raised to people whose bodies were buried or burnt in some other place. The carved battle-stones show that till Musalman times Bhavsari continued a favourite place for commemorating the dead, and the number of shrines to Satvai, Khandoba, Mhasoba, Chedoba, Vir, and other spirits seems to show that the village is still specially haunted by the dead.

An inscription on a rough stone attached to a wide burial mound in Sopara near Bassein showed that the mound was raised about B.C. 200 in honour of a person of the Khond tribe. Khond is the same as, Ghond and apparently as Kol. It remains as Kod a surname among Thana and other Kunbis and Marathas. As far as is at present known the name does not occur in the North Deccan. The mention of Kods in the Sopara stones, and the reverence for the dead which is so marked a characteristic of the Bengal Kols and the Godavari Kois, suggest that these rude monuments belong to the Kol or Kolarian underlayer or base of the Deccan population. Stone monuments like those at Bhavsari have not yet been made the subject of special search. When looked for they will probably be found and scattered over most of the Deccan. One standing stone or *ubha dhonda*, 5' 6" high, has lately (December 1882) been noticed in the village of Rajur about ten miles west of Junnar, and in the same village are traces of circles and heaps of large undressed stones. These and remains of several carved battle-pillars suggest that Rajur, like Bhavsari, down to nearly Musalman times was believed to have some special sacredness or fitness for memorials to the dead.

According to General Haig, R. E., who has lately been living among them, [Church Missionary Intelligence and Record, VII. 82, 618.] the Kois of the lower Godavari are a cheery half-naked people who burn the dead, bury the ashes, cover them with a slab of stone, and at the head set another stone of great size. Occasionally in forest tracts are rows of stones five or ten or even fifteen or twenty feet high and weighing several tons. Smaller stones mark the graves of children. In countries where stone is difficult to get the custom ceases. The Kois of the plains have given up raising tomb-stones.

These rude enclosures, circles, mounds, and open-air flat-topped tombs or shrines have a double interest. They seem to be the original of the Buddhist stupa or burial-mound and its encircling rail, and they have a more curious but less certain connection with the rude stone monuments of North Africa and West Europe. In the Deccan the fondness for tombs is still strong among Marathas and other classes, and the enclosure wall or rail

seems to survive and to have its origin in the rude circles that surround the shrines of Vetal, Chedoba, and other spirits whose worship forms so large a part of the religious observances of the lower classes of Deccan Hindus. The original object of the circle of stones, to keep evil from passing in to annoy the central object of worship, lives in the circle of *shipais* or guardians who live in the stones which surround the central Vetal.

BHIGVAN.

Bhigvan, a small village twenty four miles north-west of Indapur, within 1881 a population of 1418, has a weekly market on Sunday.

BHIMASHANKAR.

Bhima'shankar, [The eleven other great *lings* are Amareshvar near Ujjain; Gautameshvar unknown; Kedareshvar in the Himalayas; Mahakal in Ujjain; Mallikarjun on the Shrishail hill in Teliugan; Omkar on the Narbada; Rameshvar in Rameshvar island near Cape Comorin;; Someshvar in Somnath Patan in Kathiawar; Trimbakeshvar at Trimbak in Nasik; Vaidyanath at Devgad in the Santhal district of Bengal and Vishveshvar at Benaras.] in the village limits of Bhovargiri, at the source of the Bhima river about thirty miles north-west of Khed, has a famous temple of Mahadev said to be one of the twelve great lings of India. [The late Mr. G H. Johns. C. S.: Bombay Gazette, 15th March 1884,] Bhimashankar is at the crest of the Sahyadris 3448 feet above sea level. Here, in a dip in the hill top 3090 feet above sea level, and surrounded by three or four wooded heights, is the holy source from which the Bhima trickles in a tiny stream into a small built cistern. After" it reaches the plain, the Bhima receives the Bhama, Indrayani, Mutha-Mula and Nira from the right, and the Ghod and Sina from the left. It passes east through Poona and Sholapur, and, after touching the north-east border of Bijapur, flows through the Nizam's territories where it meets the Krishna near Raichur about 400 miles south-east of Bhimashankar.

Portugvese Bell.

Close to the cistern which receives the infant flow of the Bhima are two temples of Mahadev one old and out of repair and the other modern built by the famous Poona minister Nana Fadnavis (1764-1800) and finished by his widow. The old temple is a plain solid structure built of dark stone, with a vaulted roof much like the Norman crypts often found under English cathedrals and abbeys. In the hall or *mandap* is a rough stone Nandi and in the shrine a metal cast with five heads representing the god Bhimashankar. Hung on an iron bar supported between two strong stone pillars, to the east of the old temple, is a large bell weighing three to four hundredweights. [Trigonometrical Survey Report for 1877-78, 130,] Embossed on the face of the bell is a minute human figure perhaps the Virgin Mary with a Maltese cross above and the figures 1729 below, showing the year in which the bell was cast. The bell is worshipped by the people, and the cross, the human figure, and the date are painted with redlead. According to the temple priest the bell was brought from Vasind near Kalyan in Thana probably from some Portuguese church or convent about 1739 when Bassem was taken by the Marathas. The old temple

was originally much larger than it now is as its size was greatly reduced to make room for the new temple of Nana Fadnavis. The new temple is also built of dark stone and the spire rises in the form of a cone surmounted by a pinnacle. All round the outer wall of the lower part of the temple runs a row of small figures and gods in niches. The east front of the temple has much ornamental work. The rain dripping from the cement over the door has formed fringes of stalactites which harmonise with the fretwork, effectively combining nature and art in the decoration of the temple front. [Bombay Gazette, 15th March 1884.] The temple enjoys a yearly Government grant of £96 8s. (Us. 964) in cash and land assessed at about £20 (Rs. 200). The affairs of the temple are managed by six hereditary *vahivatdars* who receive the endowments. A yearly fair, attended by about 20,000 pilgrims from all parts of the Deccan and the Konkan, is held on *Mahashivratra* in February-March and lasts for two or three days.

Legend.

Two legends are told of the origin of the holiness of Bhimashankar. According to one, while Mahadev was resting after a successful but fatiguing contest with a demon named Tripurasur, Bhimak, a mythic king of Oudh of the sun line, came to do penance before the god and ask forgiveness for wounding, during a hunt, two seers in the form of deer. Shiv pardoned Bhimak and offered to grant him any boon he desired. Bhimak asked that the sweat which was still fresh on Shiv's brow might be changed into a river for the good of mankind. According to the other legend, the place first came into repute about the middle of the fourteenth century after Christ. When cutting timber in the Bhimashankar valley one Bhatirav found blood gushing out of one of the trees. Bhatirav brought his cow to the tree and dropped her milk on the stump and the wound healed in one night. A *ling* of Mahadev came out of the tree and Bhatirav built a shrine on the spot.

From the temples a side path leads to a shrine on rising ground which gives a wide view of the sacred Bhimashankar valley with many hue trees on the surrounding hills and a luxuriant growth of evergreen bushes. Though from the Konkan side the top of Bhimashankar looks bare it really is well wooded. From the crest, in the morning light, the Konkan looks spread out like a map. Matheran from Panorama to Garb at point stands boldly out straight in front.

BORIBYAL.

Boribyal, a village of 543 people on the Mula a feeder of the Bhima about twenty miles north of Baramati, has a station on the Peninsula railway 53½ miles south-east of Poona. The 1880 railway returns showed 5115 passengers and no goods. [For the minor stations of Boribyal, Chinchvad, Karle, Khadkala, Khandala, Khedgaon, Loni, Patas, Shelarvadi, Uruli, Vadgaon, and Yevat, the railway returns give no details after 1880. The figures are grouped under the head Minor Stations.]

CHAKAN.

Chakan on the Poona-Nasik road six miles south of Khed and eighteen miles north of Poona is a market town, with in 1872 a population of 3164 and in 1881 of 4055. The weekly market is held on Thursday. Chakan has a Collector's bungalow and an old fort famous in Deccan history. In the bungalow enclosure under a tree is an old stone with a carved figure like Lakshmi-Narayan except that there is a bull in the right corner.

Fort.

The fort was dismantled in 1858. About 1836 it was described by Grant Duff as nearly square with bastioned fronts and corner towers. The walls were high surrounded by a ditch wet on the north side and thirty feet deep by fifteen wide all round. The fort had one entrance on the east through five or six gateways. Beyond the wall was an outwork of mud with a ditch locally said to be the remains of a fortification made in 1295 by an Abyssinian chief. The earliest certain notice of Chakan is in 1443 when Malik-ul-Tujar, the leading Bahmani noble who was ordered by Ala-ud-din II. (1435-1457) to reduce the sea coast or Konkan forts, fixed on Chakan as his headquarters. In one of his Konkan expeditions Malik-ul-Tujar advanced with the Moghals into a woody country, where as his Deccan and Abyssinian troops refused to march, Malik was slain with 500 Moghals and the rest retired. [Briggs' Ferishta, II. 436- 439.] Contrary to the advice of the Deccan officers, who tried to persuade them to withdraw to their estates, the Moghals fell back on Chakan. The Deccan officers sent a false message to the king that the disaster was due to Malik-ul-Tujar's rashness and to the turbulence and disobedience of the Moghals, who, they said, were now in revolt. The king ordered the Moghals to be put to death and the Deccan nobles attacked Chakan. After the siege had lasted two months, the Deccan officers forged a letter from the king and persuaded some of the Moghals to leave the fort. They gave an entertainment to the rest in the fort, and while the feast was going on, attacked them and put them to death. At the same time one party of the Moghals outside the fort were attacked and every male was put to death. Another party who were more on their guard made good their escape. The survivors succeeded in convicting the Deccan nobles of their treachery and procured their punishments. From this time Chakan and Junnar continued military posts. In 1486 Zain-ud-din the commandant of Chakan revolted, and Nizam-ul-Mulk the Bahmani minister sent his son Malik Ahmad the founder of the Ahmadnagar Nizamshahis (1490-1636) to reduce Chakan. Zain-ud-din applied for help to Yusuf Adil Khan of Bijapur. Later in the same year when Malik Ahmad threw off his allegiance Mahmud Shah Bahmani II. (1482-1518) ordered Yusuf Adil Khan of Bijapur and Zain-ud-din of Chakan to attack him. Malik Ahmad tried but failed to win Zain-ud-din to his side. As the Bahmani army was advancing against him Ahmad left his family in Shivner and marched to meet the Bahmani force. During the night he suddenly turned on Chakan, was himself the first to scale the walls, and had helped seventeen of his men to gain a footing before the garrison took alarm. Zain-ud-din and his men fought with great bravery, but their leader was killed and the rest surrendered. From Chakan Ahmad marched against and defeated the Bahmani army. [Briggs' Ferishta, III. 190-195.] In 1595 the tenth Ahmadnagar king Bahadur (1595-1599) granted Chakan with other places in the Poona district to Maloji Bhonsla the grandfather of Shivaji. [Grant Duff's Marathas, 41.] In 1636 Mahmud of Bijapur (1626-1656) concluded a treaty with the Moghals under which the Ahmadnagar territory was divided

between Bijapur and the Moghals, Bijapur securing the country between the Bhima and the Nira, as far north as Chakan. [Grant Duff's Marathas, 52.] In this division of territory Chakan continued to remain in the possession of Shahaji in charge of a brave commandant Phirangaji Narsala. When, about 1647, Shivaji was trying to establish his authority in his father's Poona estates, he won over Phirangaji without much trouble. [Grant Duff's Marathas, 60.] In 1662 Shaistekhan a Moghal general was sent to punish Shivaji for his incursions into Moghal territory. Shaistekhan took Supa and marched to Chakan which was still held by Phirangaji Narsala. After examining its bastions and walls the Moghal army opened trenches, erected batteries, threw up intrenchments round their own position, and began to sap the fort with mines. Heavy rains greatly interfered with the Moghal operations. The powder was spoiled and bows lost their strings, but the siege was vigorously pressed and the front walls were breached. Though hard pressed, the garrison sallied forth on dark nights into the trenches and fought with surprising boldness. Sometimes a Maratha force from outside combined with the garrison in making a joint attack in broad daylight and placed the trenches in great danger. After the siege had lasted about two months a mined bastion blew up and stones bricks and men flew like pigeons into the air. [Waring notices (Marathas, 73) that, according to Orme, the magazine was blown, up by flying a paper kite with a lighted match at its tail; according to Dow the explosion was due to a shell.] The Moghals rushed to the assault but the Marathas had thrown up a barrier of earth inside the fortress and had made intrenchments and places of defence in many parts. All day passed in fighting and many of the assailants were killed. The Moghal army did not retreat and passed the night without food or rest amid ruins and blood. At dawn they renewed the attack, and, putting many of the garrison to the sword, carried the fort but not until they had lost about 900 men. The survivors of the garrison retired to the citadel and did not surrender till reduced to extremities. Shaistekhan treated Phirangaji with great respect and sent him in safety to Shivaji by whom he was praised and rewarded. [Khafi Khan in Elliot and Dowson, VII, 262-263. According to Khafi Khan, besides sappers and others engaged in the work of the siege, the Moghal army lost about 300 men. Six or seven hundred horse and foot were wounded by stones and bullets arrows and swords. Ditto.]

History.

According to an inscription at Chakan dated H. 1071, Shaistekhan repaired the fort in 1663. [Indian Antiquary, II. 352.] Chakan was left in charge of one Uzbek Khan. After Shivaji's surprise of Shaistekhan in Poona city in 1663, Prince Muazzim was appointed viceroy, and the main body of the Moghal army retired leaving strong detachments at Chakan and Junnar. About this time Shivaji, who had gone to Poona to hear a sermon by the great Vani saint Tukaram, narrowly escaped being made prisoner by the garrison of Chakan. [Grant Duff's Marathas, 89, note 1.] In 1667 Shivaji obtained from Aurangzeb the title of Raja and the district of Chakan along with Poona and Supa. [Grant Duff's Marathas, 99.] In 1671 the Moghal general Diler Khan captured Chakan and Lohogad with a large Moghal force. [Grant Duff's Marathas, 110] In 1685 Aurangzeb's rebel son Akbar was intercepted near Chakan and defeated by the Moghal forces. [Scott's Deccan, II.70.] In 1796 Baloba Tatya seized and imprisoned in Chakan Baburav Phadke the commandant of the Peshwa's household troops. In the 1818 Maratha War, a force under

Lieutenant-Colonel Deacon came before Chakan on the 25th of February 1818, bringing from Poona a detachment of the Bombay European Regiment and some howitzers and guns, the heaviest of them iron and brass twelve-pounders. The garrison made a show of resistance. On the first day one of their guns was disabled, and on the same evening preparations were made for establishing a breaching battery within 250 yards of the western face. The brass twelve-pounders were first brought down to battery early on the 26th to take off collateral defences, and the enemy still continued the fire they had begun on the previous day though with little execution. At the same time a position was given to the 2nd battalion of the 17th Madras Native Infantry and a company of Europeans on the south, while the Nizam's battalion occupied a post on the north. At ten the garrison desired terms; but, as they were asked to lay down their arms, they delayed capitulating till the afternoon when they marched out and grounded. [Blacker's Maratha War, 245; Bombay Courier, 7th March 1818.] In 1827 Captain Clunes mentions Chakan as a market town and fort with 300 houses and seven shops. [Itinerary, 18,]

CHANDKHED.

Cha'ndkhed village twenty miles south-east of Khadkala, with in 1881 a population of 1020, has a fair-weather weekly market on Monday.

CHASKAMAN.

Temple.

Cha'skama'n [This town is called Chaskaman to distinguish it from Chas Narodi fourteen miles north of Khed. Kaman and Narodi are villages adjoining the two towns of Chas.] on the right bank of the Bhima, six miles north-west of Khed, is a market town with in 1881 a population of 2225. Under the Peshwas Chaskaman was a place of importance especially about 1750 when Rakhmabai, the daughter of the second Peshwa Bajirav Ballal (1721 -1740) and the sister of two later Peshwas Balaji and Raghunathray, married Krishnarav Mahadev Joshi of Chas who was killed at the battle of Panipat (1761). Rakhmabai spent a large sum of money in improving Chas and built a fine flight of steps to the river and a temple of Someshvar Mahadev near the river to the west of the town. The temple is surrounded by a shady quadrangular enclosure whose outer walls have four corner bastions and end in blank petal-shaped battlements. Each battlement of the south and east bastions bears a snake ornament. The chief entrance is the east doorway fronting which inside is a striking lamp-pillar, a curvilinear basalt column ending in an elaborately carved capital with a square abacus. The pillar is lighted on the full-moon of *Kartik* or October-November. The receptacles for the lights, a few of which bear on their front sculptured figures in high relief, are said to number 350. Beyond the lamp-pillar and facing the temple is a deformed bull or Nandi on a raised platform and under a domed canopy. Below the dome and on each of the four sides the canopy has a fine cusped arch slightly ogeed. The temple is oblong and consists of the usual hall and shrine. The hall has three square headed doorways, the north and south doorways having each a grotesquely carved human head as a stepping stone. The shrine is surmounted by a brick and mortar dome adorned with niches figures and miniature domes. Three small carefully pierced holes in the wall-veil admit light into the shrine.

CHAVAND.

FORT.

Cha'vand is a ruined and dismantled fort ten miles north-west of Junnar and ten miles south-east of the Nana pass. The road from Junnar to Chavand runs through a valley between two ranges of hills one with Hadsar fort stretching to the north-west and the other with the forts of Chavand and Jivdhan running to the southwest. These three forts, and Shivner at the south-east end of the Nana pass valley, effectually guarded the Nana pass and preserved a safe communication between Junnar and the Konkan. The chief strength of Chavand lies in its great natural defences. Its artificial defences, which were weak and incapable of holding out against a hostile force, were all destroyed and the approach to the fort blown up about 1820. Except to hill men the hill is now inaccessible. Near the summit is a deep and narrow precipice which cannot be climbed except with a rope. On the plateau is a small shrine dedicated to the goddess Chavandbai. The watersupply is good but other supplies are scarce. In 1486 Chavand was among the Poona forts which fell to Malik Ahmad the founder of the Ahmadnagar Nizam Shahi family. [Briggs' Ferishta, III. 190.] In 1594 Bahadur the infant son of Burhan Nizam II. (1590-1594) was confined in Chavand for over a year and was then raised to the Ahmadnagar throne. [Briggs' Ferishta, III. 304.] In 1637 Jund or Chavand appears among the Poona forts which Shahaji gave to the Moghals. [Elliot and Dowgon, VII. 60; Grant Duff's Marathas, 53.] In the Maratha war of 1818 a British brigade was sent to take Chavand. The brigade encamped before; Chavand on the 1st of May 1818 and demanded its surrender. The commandant refused to surrender unless directed by his master. A fire of mortars and howitzers was begun in the evening and the bombardment continued till next morning during which about a hundred shells were fired. Then the garrison of upwards of 150 Marathas surrendered unconditionally. They were disarmed and dismissed to their villages. [Pendhari and Maratha War Papers, 294.]

CHINCHVAD.

Chinchvad, a small town in Haveli, with in 1881 a population of 1762, lies about ten miles north-west of Poona, on the right bank of the Pavna which falls into the Mula below the village of Aundh. In 1846 the town is described as looking well from the river side with temples, high' walls, and flights of steps leading to the water's edge. [Lady Falkland's Chow Chow, I. 292.] It is now a market town with a railway station. The 1880 railway returns show 25,355 passengers and 586 tons of goods. Chinchvad is famous as the residence, of a human shrine of the god Ganpati. The story [Trans. Bom. Lit. Soc. III. 69; Murray's Handbook, 178-179. Lord Valentia (Travels, II. 152-158) gives a different version of the story. According to this version, Moroba Gosavi was an inhabitant of Bedar and a pious man. In his youth he was turned out by his father, who found him of no use to the family. In passing Moreshvar or Morgaon near Baramati the youth felt a liking for the god Ganpati and resolved to pay him regular devotion. He proceeded to the then

poorly inhabited village of Chinchvad about fifty miles north-west of Morgaon. From Chinchvad he used to go to Morgaon every day to pay his services to Ganpati. On the fourth of the bright half of Bhadrapad or Ganesh Chaturthi (August-September) the principal day of the deity's worship Moroba could find no place in the temple to offer his services as it was crowded by the laity of the place and among them the Pingles a wealthy Brahman family. Moroba left his offerings under a tree, but through some miracle the boy's offerings were found in the temple while those of the laity were under the tree. After inquiry the boy was found out and condemned as a sorcerer and forbidden to enter Morgaon on pain of punishment. That night Ganpati appeared in a dream to Pingle and told him that he was extremely offended at his ill-usage of Moroba his favourite devotee. The next day Pingle solicited Moroba to come to the village but Moroba would not. Ganpati thereupon appeared to Moroba in a dream and expressed his wish to stay with him at Chinchvad. The next day Moroba while bathing in the river found the image of Ganpati which is worshipped at Moreshvar. He took it home and built for it a small shrine. It was soon known that Ganpati had taken up his residence with Moroba. He afterwards married and his son was named Chintaman Dev as an incarnation of Ganpati and began to be worshipped as a living god. The Dev whom Lord Valentia visited was the seventh in descent, and was suffering from some disorder in his eyes. Valentia's Travels, II. 152-158.

Mrs. Graham, who visited the living god in May 1809 or seven years after Lord Valentia, describes him as a boy not in any way distinguished from other children except by an anxious wildness of his eyes said to be occasioned by the quantity of opium which he was daily made to swallow. Residence in India, 270.] of the god is that about 250 years ago there lived in Poona a poor but virtuous couple, zealous votaries of Ganpati. They were originally childless, but their great devotion propitiated Ganpati who favoured them with a son whom they named Moroba in honour of the god. Shortly after the birth of Moroba the family removed to Pimple a village about four miles south of Chinchvad. Moroba, who from his youth was studious pious and thoughtful, after the death of his parents removed to Tathvade two miles west of Chinchvad, and from Tathvade used to pay a monthly visit to the shrine of Ganpati at Morgaon about fifty miles south-east of Tathvade. The headman of Morgaon admired his pious life and used to give Moroba a bowl of milk every time he came. It happened once that the headman was gone to work in the fields, and when Moroba called for his milk he found no one in the house but a blind girl whom he told to fetch the bowl. The girl was restored to sight as soon as she touched the threshold of the house where Moroba was. This miracle, and a little later the cure of the then rising Shivaji's eyes, raised Moroba to fame and people flocked to see him. As these visits came in the way of his daily service, Moroba betook himself to a forest which then covered the site of modern Chinchvad. When Moroba grew old loss of strength made it difficult for him to continue his monthly visits to Morgaon. Once he arrived late at Morgaon and found the shrine doors shut. Wearied with fatigue and hunger he lay down and slept. Ganpati appeared to him in a dream, advised him to offer his usual worship, and told him not to trouble to come again to Morgaon, saying, I will live in you and in your children for seven generations, and will fix my residence at Chinchvad. Moroba awoke, found the shrine door open, offered his worship, and retired to rest. In the morning, when the temple ministrants opened the doors of the shrine, they were amazed

to find the image adorned with fresh garlands and found a pearl necklace missing from the image. Search was made and the necklace was found on Moroba's neck, who was sentenced to imprisonment. But by Ganpati's aid Moroba was released and returned to Chinchvad and found in his house a conical stone rising from the ground. Recognising it as his favourite deity he built over it a large temple and soon after buried himself alive sitting with a holy book in his hand. He left strict orders that his grave should not be opened. Moroba's son Chintaman was the second living god. He once assumed the form of Ganpati to satisfy the jealousy of the great Vani poet Tukaram who prided himself on Vithoba's coming to dine with him. Tukaram called Chintaman by the surname of god or dev and, this surname has passed to his descendants. Chintaman died a natural death and was succeeded by Narayan the third dev, who is said to have changed into a bunch of jessamin flowers a dish of beef which Aurangzeb (1658-1707) sent him to test his godhood. Aurangzeb was so pleased with the miracle that he is said to have made the Dev family an hereditary grant of eight villages. The fourth dev was Chintaman II. the son of Narayan. The fifth dev was Dharmadhar, the sixth Chintaman III., and the seventh Narayan II. The last *dev* drew upon himself a curse which ruined the family. An idle curiosity led him to open the grave of Moroba, who, disturbed in his meditations, told him that the godhood would end with his son. Narayan II.'s son Dharmadhar II. died childless in 1810, and with him ended the seventh generation of the dev family. A boy named Sakhari a distant relation of the deceased was set up in his place by the priesthood to preserve the valuable grants to the temple. The only miracle which the god is believed to have still the power of working is that at the yearly entertainments given to Brahmans at Chinchvad, however limited the provisions for the guests, there is never either too much or too little, but enough for guests however numerous.

The Dev family lives in a mansion on the river built partly by Nana Fadnavis (1764 - 1800) and partly by Hari Pant Fadke a famous Maratha general (1780 - 1800). [Valentia's Travels, 11.152158.] Near the palace stand temples each sacred to one of the departed Devs. The chief temple is dedicated to Moroba. It is a low plain building (30' x 20' x 40') with a square hall or *mandap* and an octagonal shrine. On the wall of the inner shrine is a Marathi inscription in Devnagari letters which may be translated:

This temple was begun on the bright twelfth of *Kartik* (November-December) *Shak* 1580 (A.D. 1658-50) *Vilambi Samvatsara* and finished on Monday the bright fourth of *A'shadha, Vikari Samvatsara*.

On the outer wall of the temple of Shri Narayan, the third *dev* or human-Ganpati shrine, is another inscription in Marathi which may be translated.

Begun on the bright tenth of the month of *Kartik* (November-December) *Shak* 1641 (A.D. 1719-20) *Vikari Samvatsara* and finished on the bright third of *Vaishakh* (April-May) *Shak* 1642 (ID. 1720-21) *Chitrabhanu Samvatsara*.

The temples enjoy a yearly grant of £1380 (Its. 13,800) being the revenue of eight villages. [The eight villages with their revenues are Banere Rs. 773; Chikhli Rs. 2323; Chinchvad Rs. 1369; Man Rs. 1922; Charoli Budrukh Rs. 3570; Chincholi Rs. 677; and

Bhosari Rs. 3169. All are in the Poona district. Mr. Norman, Collector of Poona, 1879.] A yearly fair attended by about 2000 persons is held here in honour of Ganpati on the sixth day of the dark half of *Margshirsh* or December-January and lasts three days.

DAHOLI.

Da'holi in Maval a small *inam* village about twelve miles north- west of Khadkala, with in 1881 a population of 321, has a temple of Mahalakshmi enjoying a yearly cash allowance of £3 4s. (Rs. 32) of which £3 (Rs. 30) are paid by the proprietor of Daholi. A fair attended by about 2000 people is held on the full-moon of *Paush* or December-January.

DAPURI.

Da'puri, a village of 730 people in Haveli, on a roughly semi-circular plot of land surrounded by the windings of the Mula, on the left bank of the river, lies on the Bombay-Poona road two miles north of Kirkee and six miles north of Poona. The chief objects of interest at Dapuri are several bungalows and gardens on the Pavna a tributary of the Mula, the first bungalow built about 1820 by Captain afterwards Colonel Ford, C. B. at a cost of about £11,000(Rs.1,10,000). Captain Ford had long been the assistant of Sir Barry Close, the Poona Resident, and, in 1812, by his interest was appointed to raise and command a brigade of troops, disciplined after the English fashion for Bajirav Peshwa. The new levies were not cantoned at Dapuri till 1817. On the 5th of November of that year, in spite of the Peshwa's threats, the brigade joined Colonel Burr's army and took a prominent part in the battle of Kirkee. [Details are given below under Poona Objects, Kirkee.] It was the declared intention of Bajirav to spare Major Ford if he had succeeded. [Major Ford was a great favourite of the Peshwa. There is a romantic story of an understanding between Major Ford and Moro Dikshit the Peshwa's general. Moro Dikshit knew that they must take different sides in the battle of Kirkee and that probably one of them would die. An agreement was made, as proposed by Major Ford, that the survivor should maintain the family of the deceased. Moro Dikshit fell and Major Ford is said to have kept his word. Grant Duff's Marathas, 650-651.]

During his residence at Dapuri Major Ford was very hospitable. His house was open to all strangers and his table was maintained in a princely style. He was a liberal supporter of charities and was perhaps as greatly beloved and respected by the natives as any European who ever visited India. Soon after the victory of Kirkee Major Ford, who had attained his Lieutenant-Colonelcy, was attacked with fever and died in Bombay. His beautiful residence was bought for Government by Sir John Malcolm in 1828 at £1000 (Its. 10,000), and was used for the rainy season (June-October) residence of the Governor till 1865 when the new Government House at Ganeshkhind was completed. [Murray's Bombay Handbook, 182.] The buildings, now all out of repair, consist of a large main bungalow the old Government House, with reception rooms and a ball room eighty feet long, [Lady Falkland gives an interesting account of a Government House ball in this room about 1850. Chow Chow,I.228.] a bungalow with bed rooms, an office bungalow on the river side, a set of quarters for aides-de-camp and officers of the bodyguard, and

two bungalows for the Garden Superintendent and head gardener. Besides the bungalows there are large horse and cattle stables, servants' lines, and store rooms built at a cost of above £50,000 (Its. 5 lakhs). Of the total 71 ½ acres of land eleven acres are unarable, 12½ are occupied by buildings, and forty-eight acres formed the botanical gardens which Sir John Malcolm established about 1828 at a yearly cost of £360 (Rs. 3600) to introduce useful exotics. The gardens were at first under Mr. Williamson who soon died and was succeeded by Dr. Lash and Dr. Gibson. Dr. Gibson established, in connection with the botanical gardens, nurseries at Hivre Nirgori and Shivner' fort in Juunar. The chief experiments were in the cultivation of foreign cottons, coffee, tea, tobacco, Mauritius sugarcane, the mulberry, the cochineal insect, culinary vegetables, and fruit trees. During the American war (1863-1865) Government sold the estate by auction and Government house was removed to Ganeshkhind where new botanical gardens were made. The auction realized £21,000 (Rs. 2,40,000) and the property went to a company of three partners two Europeans and a native who managed it apparently more as a private residence than for profit until they became bankrupts, and mortgaged the estate to Messrs. Fell and Co. of Poona. The mortgage appears to have been foreclosed and, in 1874-75, the estate was sold to a Parsi gentleman Mr. Mervanji Shot for £3500 (Rs. 35,000) who spent £700 (Rs. 7000) in repairs to the bungalows. All the bungalows are now unoccupied, as the situation, about a mile from Kirkee railway station and 400 yards from the railway, makes it inconvenient for private residence. The last owner was a minor, and during his minority many of the best and most valuable trees have been cut down for £200 (Rs. 2000) leaving now a mango grove and a large number of exotic and indigenous trees. The land, which the owner held free of all rent and charges even of balutas to the village servants, had been leased yearly for about £35 (Rs. 350; including the produce of fruit trees" but subject to a monthly charge of 16s. (Rs. 8) for a watchman. The estate has been bought by Messrs. Meakin & Co. who intend to establish a brewery here. [Mr. E. C. Ozanne. C. S.; Mr. J. G. Moore, C. S.]

DEHU.

Dehu in Haveli, on the right or south bank of the Indrayani a feeder of the Bhima, is a large alienated village of 1498 people about thirty miles north-west of Poona and about three miles north of Shelarvadi station on the Peninsula railway. Dehu was the birthplace of Tukaram a Vaishya Vani by caste, the famous devotee of Vithoba of Pandharpur and one of the greatest of Maratha poets (1608-1649). The poet's spirit is supposed still to live in the Shri Tukaramdev's temple at Dehu, where a yearly fair lasting for four days and attended by about 3000 people is held in his honour on the dark second of *Phalgun* or March. Dehu has also a temple of Vithoba where about 1000 people come on the bright and dark elevenths of every Hindu month to pay their devotions to the god.

DHAMANKHED.

Dha'mankhed, a small village three miles south of Junnar, with in 1881 a population of 212, has two fairs in honour of Khandoba, on the full-moons of *Magh* or January - February and of *Chaitra* or March-April each attended by about 2000 people. The temple

enjoys a yearly Government allowance of £3 10s. (Rs. 35) in cash and rent-free land assessed at about £2 10s. (Rs. 25).

DHOND.

Dhond in Bhimthadi, on the left bank of the Bhima eight miles north-east of Patas and about forty-eight miles east of Poona, is a large market town, with in 1881 a population of 3486. Dhond is the junction of the Dhond-Manmad State Railway with the southeast branch of the Peninsula railway. Besides two railway stations, Dhond has a post office, a travellers' bungalow, a rest-house, two temples, and a mosque. The weekly market is held on Sundays. The railway returns show 188,697 passengers and 3405 tons of goods for 1883 at the Peninsula station and 125,846 passengers and 4892 tons of goods for 1880 at the Dhond and Manmad railway station. It is worthy of note that the opening of the Dhond-Manmad line has lowered Dhond from one of the largest to one of the smallest goods stations within Poona limits. The reason is that the traffic of the whole country which is tapped by the southern stations on the Dhond-Manmad line was formerly forced to Dhond. It is this fall in the Dhond returns which causes the apparent decline in goods traffic at the Poona district stations between 1871 and 1882 which is noticed but is not explained in the Trade Chapter. [See Part II. pp. 170-173.] The two temples in Dhond are of Bhairavdev and Vithoba both said to have been built by Mahadji Sindia (1760-1794) to whom the village was granted. The Bhairavdev temple is built of stone with a brick superstructure. A yearly fair is held here in April.

DIKSAL.

Diksal, a small village about twenty miles north-west of Indapur. within 1881 a. population of 483, has a post office and a station on the Peninsula railway 64½ miles south-east of Poona. The 1883 railway returns showed 31.531 passengers and 7974 tons of goods.

GARODI HILL.

Caves.

Garodi Hill, about ten miles south of Talegaon-Dabhade, has, at 450 to 500 feet above the plain, a few early Buddhist caves of about the beginning of the Christian era. The first cave, which is high up in the scarp and now almost out of reach, faces south-west by west. It consisted apparently of a single cell of which the front has fallen away. The second cave is a little lower and includes a vestibule (29'x 9' 9"x8'8") with four cells at the back. Between each pair of doors are two pillars attached to the wall, half octagons with water-pot bases and animal capitals with elephants lions or tigers over each. The capitals support a projecting frieze of the rail pattern. Along the ends and back, under the pillars, runs a bench two feet broad by one foot and seven inches high. The cells within are plain. The cave has been Brahmanised and in the third cell from the left is a *ling* with a small bull or Nandi in the vestibule and a lamp-pillar and *tulsi* altar outside. On the side

post of the cell door a short roughly cut inscription records the visit of a devotee and is dated 1439 (S. 1361, *Siddharthi Samvatsar*) the bright half of *Shravan* or July-August.

North-west at some distance from the second cave is a dry cistern, and still further along is a small cave that has apparently had a wooden front with four upright posts fitting into sockets in the rock above. In the left end is a recess and in the back a door leading into a cell. A few yards beyond is a rock-cut well and near the well is the fourth cave. The front of this fourth cave is entirely gone. To form a new front a thick wall has been built a few feet farther in than the original with two round-arched doors. The hall has four cells on the right, two in the back besides a shrine recess and three on the left, a fourth being entirely ruined. In the shrine recess was a relic shrine or *daghoba*, its capital as in the Kuda caves being attached to the roof. The relic shrine has been cut away to make room for a small low Shaiv altar or *chaurang*. Over the fourth cave to the left is a cell, on the left end of the front wall of which is an inscription in Andhra or Deccan Pali letters (A.D. 100). The inscription, which is cut in five lines on a surface full of holes and flaws, may be translated:

To the perfect one. The charitable gift of a dwelling cave or *lena* by Siagutanika, wife of Usabhanak', a Kunbi (by caste) and ploughman, living in Dhenuka-kada with her son Nanda a householder, with (?)

Crossing the ridge which joins the hill with another to the west of it are two other small caves, both monks' cells of no note and difficult to reach. [Fergusson and Burgess Cave Temples, 246-247; Separate Pamphlet, Archaeological Survey No. X. 38.]

GHODE.

Ghode on the Ghod, about twenty-five miles north of Khed, is the head-quarters of the Ambegaon petty division in Khed, with in 1872 a population of 4923 and in 1881 of 4893. A weekly market is held on Friday. Besides the petty divisional revenue and police offices Ghode has a school, a post office, and an old mosque. The mosque is rude and massive and has a three-arched front with two minarets one at each corner of the entablature. Two plain and massive onestone pillars support the arches. On each pillar a Persian inscription records that the mosque was built about 1580 by one Mir Muhammad. In 1839 a band of Kolis threatened the petty divisional treasury at Ghode. Mr. Rose, assistant collector, gathered a force of messengers and townspeople and successfully resisted the repeated attacks of 150 insurgents who besieged them the whole night. [See Part II. 307.]

GHOTAVDE

Ghotavde village, fifteen miles north-west of Poona, with in 1881 a population of 2193, has a weekly market on Tuesday.

HADSAR FORT.

Hadsar Fort rises on a steep hill near the Nana pass valley eight miles north-west of Junnar and sixty miles north of Poona. The fort lies within the limits of Hadsar village at the foot of the fort. From Junnar the road to the hill lies along the valley of the Kukdi between two ranges of high hills. The road is easy and passable even for carts, but five miles from Junnar it is crossed by the Kukdi which during the rains is difficult to ford. The approach to the fort lies over a steep ravine guarded by an embrasured and loopholed wall twenty yards long, thrown between the fort and a small hill to the west which is 700 yards round. The approach near the top, a rock-cut staircase sixty-five yards long, leads to two rock-cut gateways without doors. The hill, which is about 3200 yards round, rises about 1000 feet above the Junnar plain It is surmounted by a steep natural scarp 150 to 200 feet high. On this scarp stands the fort in shape a triangle with two equal sides. Only the wall that joins the fort with the neighbouring hill is seen from below. Except by the two rock-cut gateways the fort has no entrance. Inside are a few ruins, the commandant's office or *kacheri*, and a small temple. On the west a rock-cut passage leads to three underground chambers which are used as storerooms, one of them being filled with water. The water-supply is from several cisterns inside the fort.

History.

Hadsar was one of the five Poona forts which Shahaji gave to the Moghals in 1637. [Elliot and Dowson, VII. 60; Grant Duffs Marathas, 53.] It fell to the British in 1818 soon after the fall of Junnar (25th April 1818). The commandant of Junnar, hearing that the English were marching on Junnar, left the town and fled to Hadsar. Major Eldridge learning of the flight to Hadsar sent a small detachment under Major M'Leod which reduced Hadsar and captured the fugitive commandant with twenty-five horses and four camels. [Pendhari and Maratha War Papers, 293-294; Bombay Courier, 16th May 1818. A correspond it of the Courier mentions Hadsar fort as deserving of notice, apart from its natural strength, from the labour spent on its two gates and its entire rock-cut passage. The gates with the connecting passage were entirely rock-cut and had not a foot of masonry about them. 'You enter the side of the mountain, go up a passage, and through another gate to the hill, and then get into the interior of the fort as if you were entering a well.' Ditto.]

HINGNE KHURD.

Hingne Khurd is a small village on the Mutha about four miles south-west of Poona, with in 1881 a population of 121. The village has a modern temple of Vithoba with steps leading to the river-bed where a large fair is held twice a year in June-July and in October-November. The temple, which is of stone and brick, was built by Shivaji, and has since been repaired and added to by a rich Poona contractor of the Gavandi or mason caste named Bhau Mansaram. The temple (50' x 15') includes a shrine and two halls and is enclosed by a stone wall. The fair called Viththalvadi is held on the bright eleventh of *Kartik* or October -November and *Ashadh* or June-July. About 25,000 people attend each fair and sweetmeats and toys are sold in large quantities. The Khadakvasla canal flows behind and not far from the temple.

HIVRE BUDRUKH.

Hivre Budrukh, a small village eight miles east of Junnar, with in 1881 a population of 1160, has, to its west, a tomb of Pir Lalkhan, where a yearly fair or *urus* is held on the dark third of *Chaitra* or March-April attended by about 5000 people. The tomb enjoys a yearly Government grant of 123. (Rs. 6).

INDAPUR.

Inda'pur, north latitude 18° 8' and east longitude 75° 5', on the Poona-Sholapur road about eighty miles south-east of Poona, is a municipal town, the head-quarters of the Indapur sub-division, with in 1872 a population of 7740 and in 1881 of 4242. The great fall in the population is due to the famine of 1876-77 during which Indapur and the country round suffered severely. Besides the sub-divisional revenue and police offices Indapur has a municipality, dispensary, anglo-vernacular school, travellers' bungalow, a weekly Sunday market, and a considerable manufacture of country cloth. The municipality was established in 1865 and had in 1882-83 an income of £191 (Rs. 1910) and an expenditure of £189 (Rs. 1890). The dispensary was established in 1870 and in 1883 treated six in-patients and 5300 out-patients at a cost of £83 8s. (Rs. 834). A yearly fair is held in November-December in honour of a Musalman saint Chand Khan.

The earliest reference to Indapur is in 1486 when it is mentioned as belonging to the first Bijapur king Yusuf Adil Shah. Zain-ud-din, the commandant of Chakan fort, had revolted and asked the help of Yusuf who sent 6000 horse which he ordered to encamp near the fort of Indapur. [Briggs' Ferishta, II. 530.] About 1640 Indapur with Baramati was included in the territory of Shahaji the father of Shivaji. [Grant Duff's Marathas, 56.] In 1707 Aurangzeb conferred Indapur and Supa on Shahu. [Grant Duff's Marathas, 184.] In a revenue statement of about 1790 Indapur appears as the head of a *pargana* in the Junnar *sarkar* with a revenue of £10,890 (Rs. 1,08,900) [Waring's Marathas, 240.]. In 1828 Indapur is noticed as once a place of importance. Its trade was fallen and it had no manufactures but the weaving of coarse cloth for the local markets. [Mr. Pringle in Lithographed Papers, 6-9-28. In 1827 Captain Clunes (Itinerary, 271 notices Indapur as a *kasba* or market town with 1500 houses, a water-course, and wells.]

INDORI.

Indori in Maval, an alienated village on the left, bank of the Indrayani ten miles east of Khadkala, with in 1881 a population of 990, has a bastioned fort picturesquely placed on a steep bank washed by the Indrayani. The village is held in *inam* by the Dabhade family of Talegaon.

JEJURI.

Jejuri, [Contributed by Mr. J. McL. Campbell, C. S.] a station on the West Deccan railway, on the old Poona Satara road about ten miles south-east of Sasvad, is a famous place of pilgrimage, with in 1881 a population of 3245. Jejuri has a school, a post office,

and a police station. The railway station is expected to be opened in 1885. A municipality was established in 1868 to carry out sanitary arrangements during the religious fairs to which the village owes its importance. These fairs are in honour of the god Khandoba, who is also called Bahiroba, Malhari, and Martand. Khandoba has two temples at Jejuri, both built at the end of an outlying spur of the Purandhar range which here sinks into the plain. The larger and more modern temple stands close to and about 250 feet above the village. The older temple is built on a small plateau called Karepathar two miles off about 400 feet higher. The old village site now deserted was to the east of the hill, on which the lower temple stands. The modern village includes two wards or peths, Budhvar to the north of the temple hill and Aditvar to the west of Budhvar. Close to the south of the old village site is a reservoir, thirty-seven acres in area, built by the last Peshwa Bajirav II. (1796-1817) and called after him the Peshwa's reservoir. It is round and encircled with a massive stone wall in good preservation. The water which is used for crop-watering is drawn off through an elaborate mass of masonry. Stairs lead to sluices which draw the water off at different levels. The reservoir has several small bathing cisterns or hauds and a shrine of Ganpati. In the low ground beyond the Peshwa's reservoir, and fed by soakage from it, is a well or spring called Malhar Tirth or Malhar's Pool bathing in which forms part of the pilgrimage ceremonial. On the north-west of the new village a square stone reservoir, of about twenty acres, was built about 1770 by Tukoji Holkar. As it is on a higher level than the village, its waters are drawn off in covered channels to feed dipping wells built by the municipality at various points in the village.

Between this reservoir and the village stands a temple to Mahadev built in memory of Malharrav Holkar. The chief object of worship is a *ling* behind which are statues of Malharrav and his three wives Banabai, Dvarkabai, and Gotamabai, all in Jaipur alabaster.

Khandoba's Temple.

Three flights of steps on the east, west, and north lead to Khandoba's temple. The east and west steps, which are simple flights, are little used, the main approach to the temple being on the north. This approach is spanned by several arches and flanked by numerous shrines and lamp-pillars. [According to a saying this approach has eighteen arches, 350 lamp-pillars, and 900,000 steps. The number of the steps is admitted to be a fancy number, but the total of the arches and of the pillars is said to be correct.] At about a third of the way up, the flight of steps divides into two branches which join again about fifty feet higher. At the meeting pilgrims visit the shrine of Khandoba's ministers, Hegadi a Dhangar and Pradhan a Vani, on the way up, and the shrine of Khandoba's second wife Banal on the way down. Both of these shrines are on the right hand. The votive images of sheep and other cattle offered by pilgrims are placed in front of Banai's shrine who was a Dhangar the sister of Hegadi. As Mhalsa, Khandoba's first wife, was jealous of Banai, Khandoba, to preserve peace, placed Mhalsa on the top of the hill and Banai near the foot. The stairs lead up the hill to a fort-like enclosure, oblong, eight-sided, and 350 yards round. Above a high plinth of plain masonry a colonnade or open cloister runs round the hill top and encloses a paved court in the middle of which stands the temple of Khandoba. Outside and near the gate is a hole in the wall venerated on account of a

miracle by which the god saved the Jejuri temple from the Musalmans when the fine temple of Bhuleshvar, about fifteen miles to the north, was wrecked. The story is that as the Musalmans were beginning to break the carved work a swarm of hornets came out of the hole, put them to flight, and so convinced them of the power of the god that they gave up the attempt to harm the temple. Aurangzeb (1658-1707), to show his respect for the god, is said to have presented the temple with a diamond worth £12,500 (Rs. 1½ lakhs). The diamond remained in the temple till 1850-51 when it was robbed by Kolis and temple servants.

In front of the court-yard, raised a few inches from the level of the pavement, is the representation of a tortoise almost circular in outline and about twenty feet in diameter. A few years ago the tortoise was plated with brass at the expense of some Konkan fishermen. Beyond the tortoise is the lower part of the mast formerly used in hook swingings. Beyond the mast and facing the temple is the giant Malla, a huge nine feet stone image painted red and leaning against one of the pillars of the cloister. In the temple porch hang two bells, one of them Portuguese with the inscription 1711 N. S. Dasangust, that is Our Lady of Troubles. According to one of the oldest of the temple servants this bell was brought in his youth or fifty years ago by a Bombay Mali or gardener. It probably has the same history as the large Bhimashankar bell which is one of the spoils of Bassein. The other bell has an undated Marathi inscription, saying it is the gift of two worshippers of Shiv. A clumsy sword with a blade four feet long and four inches broad, kept in the porch, is said to have belonged to the demon Malla.

Besides this porch the temple consists of a square hall with an inscription dated A.D. 1675 (Shak 1597). Behind the hall under the spire is a dark chamber. In this dark chamber behind a *ling* stand three pairs of images of Martand or Khanderav and Mhalsa. One pair in gold is a present from the Povar family, a pair in silver is from one of the Peshwas, and the old pair is in stone. The temple is of cut-stone and the spire is of stucco ornamented with figures of gods and other devices. An inscription in the inner hall bears a date corresponding to A.D. 1675 (Shak 1597) and another on the inner threshold is dated A.D. 1381 (Shak 1303). Behind are a temple of Shiv called the Panchling temple and built in 1755 by Vithalrav Dev Sasvadkar of the Vinchurkar family, and a chamber for the distribution of yellow powder built in 1754 by Devaji Chaudhari of Shrigonda in Ahmadnagar. In the section of the surrounding corridor or cloister behind, or to the west of, these temples is the shapeless stone representing Mhalsa, the first or Lingayat Vani wife of Khandoba. Inscriptions show that this part of the encircling corridor was built in 1742 by Malharrav Khandoji Holkar who also built other parts of it between 1737 and 1756. The corridor was completed in 1770 by Tukoji Malharrav Holkar. The flat roof of the corridor commands on the south and west a good view of the Purandhar range and the spurs stretching from it into the flat Deccan; while to the north and east lie the plains of Sasvad and Supa.

Upper Temple.

The plateau of Karepathar is 11½ acres in extent, and, besides a temple of Khandoba older and more sacred than the one near the village, contains several other temples and

shrines and thirteen houses occupied by priests and temple servants. None of these buildings have any architectural interest.

Sacred Spots.

On the profile of the spur between the upper and lower temples several sacred spots are marked by shrines and arches. At one point is an indentation in the rock said to have been caused by the foot of Khandoba's horse. The legend is that some Brahmans living near Jejuri were attacked and their property carried off by a demon called Manimal Malla or Mallasur. In answer to the prayers if the Brahmans Shiv appeared as the warrior Khandoba and slew the demon. Before his death Malla was converted to Shaivism and both he and Khandoba were absorbed into Shiv. In acknowledgment of Malla's conversion obeisance is made to the large stone image of Malla which stands in the court-yard of Khandoba's temple.

Festivals.

The chief festivals are four all between December and April. The earliest is from the bright fourth to the bright seventh of *Margashirsh* or November-December, the next from the bright twelfth to the dark first of *Paush* or December, January, the third from the bright twelfth to the dark first of *Magh* or January - February, and the fourth and last is from the bright twelfth to the dark first of *Chaitra* or March, April. These four are large fairs attended by pilgrims from as far as Khandesh, Berar, and the Konkan.

Somvati Amavasya.

Two smaller festivals as a rule are attended only by people from the immediate neighbourhood on Somvati Amavasya or the no-moon Monday whenever it comes and Dasra the bright tenth of *Ashvin* or September-October. On the no-moon Monday the god is taken in procession for a bath. He is carried in a palanquin to a temple of Devi on the Karha in the lands of Mauje Dhalevadi two miles north of Jejuri, where he is bathed in the river and carried back to the temple. From 500 to 1000 people from the neighbouring villages attend this ceremony.

Dasra.

At Dasra in September-October a palanquin procession starts from the temple near the town and at the same time another palanquin procession starts from the temple on Karepathar. They march towards each other on the hill side, halt when the processions have almost met, and after a short interval each returns to the temple from which it started. The processions are joined by crowds from the neighbouring villages but not by the distant pilgrims. In former days one of the ceremonies performed at Jejuri was that on the bright sixth of *Margashirsh* or November-December one of the *vaghyas* or men devoted to the temple was required to run a sword through his thigh. The bloody sword was laid before the god and the man had to walk through the town in spite of his wound. In those days hookswinging was practised at all the fairs chiefly by women. The usual

vows now are to build steps in the ascents to the temples, to make cash gifts to the temples, to distribute cocoa-kernel and turmeric in front of the temple, to kill and eat a sheep in honour of the god, to feed Brahmans, and to devote to the god male children or *vaghyas*, and female children or *murlis*. [Of Vaghyas and Murlis details are given in the Population chapter, Part I. pp. 476-477.] The number of persons thus devoted to the god is considerable.

Pilgrims.

Many of them live at Jejuri, where, at festivals, they are hired by pilgrims to sing and dance in honour of the god. Others live in the surrounding villages, and many wander and beg in bands. The worshippers are chiefly Marathas, who come from all the Surrounding districts and even from greater distances. The most important of the pilgrims are the Marathas from Khandesh and Berar, large bands of whom attend the fairs every year. The Berar Marathas attend the Paush or December-January fair. Pilgrims from several villages come in large bands for mutual protection a relic of old unsettled times. Pilgrims also come from Khandesh chiefly in Margashirsh or November-December, Paush or December-January, and Magh or January - February; they do not come in Chaitra or March-April. Like the Berar pilgrims they come in large bands. The fishing Kolis from the sea coast are also worshippers of Khandoba and come, occasionally in large numbers but they do not attend as regularly as the pilgrims from Khandesh and Berar. When they do come Konkan Kolis attend the Magh or January-February fair. The Kolis have a bhagat who has a palanquin, of Khandoba. The bhagat consults omens, and unless they are favourable the fishermen do not make the pilgrimage. In January and February each band of pilgrims brings with it a gay red or red and yellow banner on a tall staff. On the dark first these banners are carried in procession up to the temple; There the bearers stand on the brass tortoise in front of the temple and hold the long banner poles aloft pointing them towards the pinnacle of the temple. They then ascend the hill with their banners which they carefully carry back with them to their villages.

The pilgrims chiefly lodge with the Guravs who have seventy-five houses or with Brahmans who have seventy-five to eighty houses in Jejuri. Other pilgrims camp in a fine grove beside Holkar's reservoir or in the open fields to the north, north-west and north-east of the village. Dotted over the fields and clestering round the lofty pole from which flies a gay banner, the camps have a picturesque effect.

On the day of his arrival the pilgrim takes a dust-glimpse or *dhul darshan* of the god and lays before him a cocoanut and $\frac{1}{4}d$. ($\frac{1}{4}$ a.). The pilgrim must repeat his visit to the god at least once during every day of his stay in Jejuri, and each time that he enters the temple gate he pays $\frac{3}{4}d(\frac{1}{2}a)$ as municipal pilgrim tax. On the second day the pilgrim pays his vow. If the vow is to feed Brahmam; the catering is usually done by contract by the Brahman or Gurav at whose house the pilgrim is lodging at the rate of 8d. ($5\frac{1}{3}$ as.) a head. When a feast is given to Brahmans one: man's portion must be taken to the temple by the pilgrim. He lays; it before the god and it becomes a perquisite of the temple Guravs. If the vow is to offer a sheep it is killed on payment of $1\frac{1}{2}d$ (1 a.) ahead, half of which goes to the municipality and half to the *Mulla* who kills the sheep. Then at his

camp or lodging the flesh is eaten by the pilgrim and his party who must be joined in their meal by some of the *vaghyas* and *murlis* or men and women devoted to the temple. After the meal is over the party go to pay their respects to Banai, Khandoba's Dhangar wife, and the guardian of his flocks and herds. On the evening of this day the pilgrims provide themselves with torches and oil vessels, and, with lighted Torches, proceed in large bodies to climb the hill. On reaching the top they pay their respects to the god, wave their torches in front of the temple, walk round the battlements of the encircling corridor, and go down to their camps. From a distance the effect of the irregular lines of twinkling lights moving up and down the flights of stairs and appearing, now many and now few, on the battlements is striking.

On visiting the temple every pilgrim stands on the brass tortoise and throws into the air handfuls of chopped cocoa-kernel mixed with turmeric to be scrambled for by the temple servants and hangers-on. The pilgrim keeps some pieces to carry home with him as the god's favour or *prasad*, a charm to bring a blessing. A favourite form of worship is to pour over the sacred *ling* the five nectars or *panchamrit* a mixture of milk, curd, sugar, honey, and clarified butter.

After the torch-light procession is over, pilgrims who have made vows to offer music and dancing to the god, hire bands of *Vaghyas* and *Murlis* to come to their lodgings or camps and there sing play and dance in honour of the god. The fee for a band of dancers and musicians is 2s. 6d. (Rs. 1¹/₄).

Pilgrims who are strong enough to climb to the Karepathar or old temple spend their third day at Jejuri in visiting the old temple. They bathe at the Malhar *tirth*, the well or spring beyond the Peshwa's pond; they then climb to the Karepathar, and, after paying their respects to the god, come back to the village by a different path from that by which they climbed. Then they do their shopping, which, except a little trade in blankets, is of no importance. The things usually bought by pilgrims about to leave are pulse and parched gram to eat by the way, coats and caps as presents for their children, and small brass vessels and images of the god as tokens of the pilgrimage. When pilgrims, who have lodged with Brahmans or Guravs, are about to start on their return home they make presents to their hosts according to their means. The hosts in return give the pilgrims as a favour or prasad from the god a cocoanut, a piece of cocoa-kernel with some turmeric, and a blessing.

Priests.

The temple priests are Guravs not Brahmans. Of the temple revenues, the offerings for two months and eighteen days or seventy-eight days in all, the Saturdays Sundays and Mondays or twelve days of *Ashvin* or September-October, the first six days of *Margashirsh* or November-December, and the whole or sixty days of *Paush* or January-February and *Magh* or February-March, are received and administered by a committee who manage the temple affairs. The revenue for the rest of the year goes half to the Guravs and a quarter each to the Ghadshis or musicians and the Virs or mace-bearers, two classes of temple servants.

The municipal pilgrim tax is levied for four months from about December to April. Admission to the temple is free for the rent of the year. The right to collect the tax is put to auction, there being two farms in the year, one for *Chaitra* and the second for the three other pilgrimage months *Margashirsh*, *Paush*, and *Magh* In 1882-83 the revenue from the pilgrim tax was £210 (Rs. 2100). The rates are a quarter of an *anna* for children under twelve and half an *anna* for persons above twelve. The number of pilgrims attending each fair is said to vary from 2000 to 5000 or 6000.

Trade.

The business done at Jejuri is small and is mostly confined to the sale of the food required by the pilgrims, articles used in the performance of religious ceremonies, tokens of the fair, and small presents to be taken home for wives and children. A few traders, principally Kunbis and Musalmans, come from Supa and Poona and set up booths in the streets, and a few shops are permanent. The articles chiefly sold are red and yellow powder, cocoanut-kernels, and split and parched pulse. Groceries, vegetables, fruit, sweetmeats, copper and brass vessels, images of gods, bangles, and caps and coats for children are also sold but in smaller quantities. The fairs are also attended by considerable numbers of blanket-sellers but by very few cotton-cloth sellers.

There is a municipal tax on booths the scale of rates being 2s., 1s., 6d. and 3d. (1 rupee, 8 as., 4 as., and 2 as.). After each fair a subcommittee of two of the municipal commissioners settle at which of the above rates fees are to be levied, the rate being fixed with reference to the number of people who have attended the fair and the amount of business which has been done. The Jejuri municipality was established in 1868 and in 1882-83 had an income of £303 (Rs. 3030) and an expenditure of £292 (Rs. 2920). The income is chiefly drawn from octopi and the pilgrim tax.

History.

In 1662 Shahaji the father of Shivaji visited Jejuri temple among other places in Shivaji's territory. [Grant Duffs Marathas, 85.] In 1792 Captain Moor described Jejuri as a pretty large town inhabited by Brahman beggars. The temple was on the top of a range of hills ascended on the north-east by a flight of handsome broad stone steps Arches were thrown across at intervals and there were many lamp-pillars. The chief temple was old but not handsome. The enclosure was large and the stone work beautifully finished and the ground paved with flags. To the west of the temple hill was a large pond of fine stone. [Moor's Narrative, 347-348.] In 1795 Tukojirav Holkar encamped at Jejuri. [Grant Duff's Marathas, 517.] In 1813 Mr. Elphinstone describes the temple as approached by two flights of steps. The chief flight had arches over it in many places and many stone obelisks with stone projections for lamps round their sides. Within the wall was a round court within which stood the temple remarkable for nothing. The temple was dark and the god scarcely visible. Mr. Elphinstone was followed by many beggars and among others by a boy who barked like a dog. [Colebrooke's Elphinstone, I. 255 - 256. The dogservants continue in Malhari's temple at Gudguddapur in Dharwar. The dog is so sacred to Khandoba that among Marathas the usual way of calling a dog is to cry Khandi

khandi.] In 1827 Captain Clunes notices Jejuri as a post-runner's station with 430 houses fifty-four shops and a temple of Khandoba where as many as 100,000 people used to attend at the great January fair. [Itinerary, 23.] In the 1845 disturbances of Raghoji Bhangria the insurgents carried off on one occasion the litter of the god with the holy image but brought it back. [See Part II. p. 308.]

JIVDHAN.

FORT.

Jivdhan, [Deccan Papers, No. 60; Mr. J. McLeod Campbell, C. S.] about 3000 feet above sea-level and about 970 feet above the plain, is a dismantled fortress commanding the Nana pass sixty-five miles north-west of Poona and sixteen miles west of Junnar. The fort, which is about 1000 yards long by 500 broad and nearly two miles round, stands within the village limits of Ghatghar on a steep and rugged hill which rises about a thousand feet above the crest of the Nana pass. Jivdhan is a square stack of a hill rough on all sides surrounded by steep precipices and presenting an abyss on the Konkan side so sheer that a stone dropped would fall almost 2000 feet into the Konkan at the foot of the Sahyadris. [Hamilton's Description of Hindustan, II. 48,] In general effect Jivdhan is much like Shivner. It differs in three points. The east scarp of Jivdhan is highest near the middle of the hill face while in Shivner the middle part is the lowest; the north point of Jivdhan is much squarer and blunter than the north point of Shivner; and the upper hill in Jivdhan is higher than the upper hill in Shivner. The road from Junnar to the foot of Jivdhan is fit for laden cattle. The ascent, which is about a mile long, is very steep and difficult and consists mostly either of loose masonry or steep sheets of rock not difficult for bare feet but troublesome for boots. For about 300 feet of the ascent a profile of rock has the remains of a stair of steep high and narrow steps with nothing below and very little on either side. The hundred feet in the middle of the stair were blown away when the fort was dismantled about 1820. Of the blown away section the middle part is not difficult to climb on all fours or to come down barefoot face foremost. But about a third at the lower and another third at the upper ends are extremely-steep. Except the hillmen few natives can go up the steepest parts and few Europeans can climb them without a rope and bare feet. The climber's only helps are small foot-holds which the people have cut in the rock and finger-holds in the bottoms of some of the 1820 blasts. The main gate was on the west towards the Nana pass with what apparently was a fine ascent, a long steep stair partly built and partly rock-cut climbing a narrow gorge completely commanded by the fort. The ascent led to a landing place, a square well about thirty feet deep, and, out of the well, the ascent passed by a tunnelled rock-cut stair to the gate. The stair was blown away and the tunnel filled in 1820 and the gate is now useless. The top has five cisterns which form the main water-supply, and some apparently Buddhist caves with a substantial Muhammadan building in front, plain and with solid masonry arches. Each compartment of the Muhammadan building has a saucer-shaped roof of good wellfitting masonry. The chief Buddhist cave (36' X 21' X15') has a smaller cave on either side and a veranda in front. The caves were used as granaries and when the fort was captured in 1818 they were found stored with grain. The grain was burnt and its ashes

remain ankle deep. Jivdhan commands a splendid view west to the Salsette hills, Tungar, and Kaman in Bassein, and, on a clear November day, to the sea.

History.

In 1489 Jivdhan was taken by Ahmad I. the founder of the Ahmadnagar Nizam Shahi family (1490-1636), and in 1637 it was one of the five Poona forts which Shahaji gave to the Moghals. [Elliot and Dowson, VII. 60; Grant Duff's Marathas, 53.] In the 1818 Maratha war a brigade under Major Eldridge reached Jivdhan on the 3rd of May 1818. The commandant who had been summoned to surrender two days before, declined to give up the fort saying he would fight for eight days. An advanced reconnoitring party under Captain Nutt of the Engineers, were frequently fired on from the guns and matchlocks in the fort but without loss. A spot was chosen for the mortars and a battery for two brass twelve-pounders till eighteen-pounders could be got ready to play on the masonry about the gate. The mortars opened at about twelve o'clock and after an hour's firing of about twenty shells a man was sent down to say that the garrison would open the gate. This was immediately taken possession of by a party of the Bombay European Begiment. The garrison was disarmed and dismissed. [Maratha and Pendhari War Papers, 294. An officer in Major Eldridge's force describes Jivdhan (Bombay Courier, 16th May 1818) as absolutely impregnable as it had bombproofs for the garrison to retire to. The last flight of steps which led to the fort consisted of 240 rock-cut steps each 14 foot high and as steep and hard to climb as a ladder. Midway down the hill on the north-west a level ran out for 100 yards and the mountain then became as steep as before. From the edge of the small level rose a natural pillar of rock about 300 feet high nodding over the abyss below. On the south-west the hillside was so steep that a stone dropped from the hand would reach the Konkan about 2000 feet below.]

JUNNAR.

Description.

Junnar, north latitude 19° 12' and east longitude 73° 56', lies in a broad flat valley about 2000 feet above the sea, on the south or right bank of the Kukdi, fifty-six miles north of Poona, and about six-teen miles east of the crest of the Sahyadris. To the south-east the valley opens into the wide Deccan plain which spreads like a sea to low lines of flat-topped uplands far to the east and south. On other sides, within a radius of about two miles, the town is shut in by irregular ranges of hills 600 to 1200 feet above the plain. The hill-sides rise steep and bare to upper slopes crossed by level belts of rock whose smooth black walls appear in one range after another although separated by gaps of many miles. The lower belts of rock are in places dwarfed by earth and stones washed from the upper slopes, or the wall is broken where a torrent has forced its way through some crumbling or earthy vein. Still many belts of rock with rounded or wall-like fronts stretch across the lower slopes for hundreds of yards. Near the tops of one or two of the hills, notably of Shivner to the west of the town and of Hatkeshvar to the north, unbroken by torrents and unhid by earth and stones, a wall of trap 100 to 150 feet high girdles the hill-top like a huge piece of masonry work The outline of most of the hill ranges is waving

and irregular, the tips of the higher peaks in many cases being smoothed flat as if by a plane. In others, as in Shivner and Hatkeshvar, the great wall of rock is topped by a small rounded or level hillock. Below the base of the hills runs a belt of barren upland from which bare spurs stretch towards the river, rocky or soilless except in a few dips and hollows. The outer flats have a thin sprinkling chiefly of *babhul* bushes. The town is amply shaded and has some splendid *pipal* and banian trees and the river banks are green with groves and gardens. The town, with its long winding streets and open empty spaces, stretches over a mile along the right or south bank of the Kukdi, and beyond the town to the east south and west ruined heaps and fairly preserved tombs and mosques bear witness to the greatness of Musalman Junnar.

Hills.

The hills that encircle the town form four leading groups; the low curving line of the Manmoda range to the south and southwest; the high level scarp of Shivner to the west; the lower and tamer Mangni hills to the north-west; and the high flattened tops and scarped sides of Hatkeshvar and the Suleman or Ganesh hills on the north. The Manmoda hills rise from the plain more than two miles to the south-east of Junnar. They run for about half a mile to the north, and then, with a shallow horse-shoe curve, sweep about two miles to the west and north-west towards Shivner from which they are separated by the sharp-cut gap of the Pirpada pass. Their waving irregular crest varies from 400 to 600 feet above the plain. Along the bare north-east face, about a third of the way up, runs a belt of rock, sometimes fifty or sixty feet high, in other places half-hidden by earth and stones. In this belt of rock are carved three groups of Buddhist caves: the Bhimashankar group in the east face, the Ambika group about the centre of the north face, and the Bhut ling group some hundred yards nearer the north-west. To the north of the Manmoda hill, separated from them by the deep cup-shaped hollow of the Pirpada pass for nearly a mile across the valley, stretches the great flat scarp of Shivner, the hill-fort of Junnar, the birthplace of Shivaji (1627). Steep strong slopes and belts of rock rise sharp and bare about 800 feet to a great wall of rock a hundred to 150 feet high which girds its level top. In the north of the hill nothing shows above this wall of rock. Further south a smooth flat inner mound rises about 200 feet above the main hill top. Several old Musalman buildings give a special interest to the top of Shivner: a small watch-tower at the extreme north, a mosque with a fine flying arch stretching between its minarets at the north foot of the inner hill-top, and on the flat crest of the inner hill a Musalman tomb and prayer-wall. Beyond Shivner, to the north-west, appears the bare rounded shoulder of the Tulia hills with the Tulja caves hid in a hollow in its eastern face. To the north of the Tulja hills stretches the Kukdi valley, and beyond, on the northwest, the irregular range of the Mangni hills runs to the Mhar pass. To the east of the Mhar pass the steep sides of Hatkeshvar rise about a thousand feet to the great wall of trap which encircles its inner summit. Close to the east of Hatkeshvar are the dome-like crags of the Navra-Navri that is the Bride and Bridegroom, or the Varat that is the Wedding Party hill, because they say the hill opened and swallowed a wedding party and the rounded crags are their tombs. The smooth-topped hill to the south-east is known as the Suleman hill because agates used to be found there, and also as the Ganesh hill because the chief of a group of Buddhist caves carved in its lower slopes is now a temple of Ganpati. In the plain,

beyond the end of the Ganesh hill, stand a few single peaks, the remains of the south-east spur of the Suleman range. To the south, opposite the east face of the Manmoda range, the single pyramid hill of Dudhare, with its point crowned by the white tomb of a Musalman saint Pir Shall Daval, completes the circle.

The usual camping ground at Junnar is in the Bara Bavdi or Twelve Well garden to the south-west close under the great rocky face of Shivner. From the east the road to the Bara Bavdi passes through the length of the town leaving the fortified enclosure in which are the mamlatdar's and other offices on the right and passing among splendid banian and *pipal* trees about half a mile to the south-west of the town. Another pleasant camping ground lies to the north of the town in a large garden and mango grove about half a mile to the south of the Ganesh caves. At the north-west limits of the town in a large enclosure are two good bungalows belonging to the Church Missionary Society. One of these is generally occupied by the resident missionary; the other bungalow is usually empty, and, by the kindness of the resident missionary, if arrangements are made beforehand, is generally available for the use of district officers and other travellers.

Sub-Divisions.

The town covers a belt of land over a mile long and from a quarter to half a mile broad. Within these limits are many empty spaces, graveyards, gardens, and the walled enclosures of old fortified mansions. The town is divided into thirty-three wards or sections, some of them known as *puras* and others as *vadas*, of which thirteen are outside and twenty-one are central sub-divisions. The outside subdivisions are Shukravara, Syedpura, Pethfansumba, Maicha-mohalla called after a saint Mai whose mosque is in this sub-division, Sepoy-mohalla, Kothudpura, Mansurpura, Mandai, Kalyanpeth called after Kalyan Musalmans who founded it about the middle of the seventeenth century when (1648) Shivaji took Kalyan, Malvada, Fakirpura, Khalilpura, and Khalcha Malvada. The twenty-one central subdivisions are Chambhar-ali, Kumbhar-ali, Khatik-ali, Dhorvada, Mharvada, Kasar-ali, Pilucha-mohalla, Sadabazar, Chandipura, Syedvada, Ovanbazar called after Mr. Ovans an assistant collector who founded it, Varchi-ali, Shankarpura, Murlidhar-ali, Mahajan-ali, Sarai, Aditvar, Budhvar, Kagdivada, Eadarpura, and Mangalvar. In Musalman times one more sub-division to the east was called Amravatipeth. This is now Amrapur village outside of Junnar limits.

People.

The 1872 census showed a population of 10,298 of whom 8205 were Hindus and 2093 Musalmans. The 1881 returns showed an increase of seventy-five or 10,373 of whom 8367 were Hindus including; 415 Jains, and 2006 Musalmans. Most of the roads in Junnar are narrow and full of corners. They are metalled and the main thoroughfares are fairly smooth and clean.

Houses.

Junnar houses are generally one-storeyed and built on a plinth a foot or two high. The walls are of dressed or unworked stone, burnt or sun-dried bricks, or white earth, and sometimes the weight of the roof, which in almost every case is covered by rough flat brown tiles, is borne by wooden pillars. Some of the fronts, but these houses are in most cases used as shops us well as dwelling places, are enclosed with red wooden planking. The only ornament is that occasionally doors and windows end in a rounded arch with waving sides in the Musalman prayer-niche or *nimbara* style. A few of the double-storeyed houses have deep eaves and forward beams with faces carved in tracery and other ornament. In some of the richer part's of the town the street fronts of the houses, chiefly houses belonging to Brahman moneylenders, are blind walls with only a small door opening on a courtyard.

Shops.

Junnar has 288 shops, chiefly in the six sub-divisions of Aditvar, Budhvar, Kagdi-vada, Kalyan-peth, Mangalvar, and Sadabazar. The shopkeepers are Gujar Lingayat and Marwar Vanis, Brahmans, Telis, Salis, Koshtis, Kasars, Tambolis, and Musalmans. [The details of shops are: Sixty of Vani grain dealers and grocers, forty-eight of papar-dealers thirty-eight of Salis and Koshtis, thirty of oilmen, twenty of cloth-dalers, twenty miscellaneous, eighteen of goldsmiths, eleven each of betel leaf sellers and sarafs or money-changers, ten each of confectioners and dealers in fruit and vegetables, six of bangle-makers, four of coppersmiths, and two of dyers.] The shops are generally the fronts of one-storeyed houses which are sometimes open with a deep overhanging eave generally tiled, or the front is closed chiefly by wooden planking. In a few of the better class of shops belonging to grain-dealers and grocers the front is used as a veranda and work is carried on in an inner room. The chief articles sold are grain of all sorts, dry-fish, oil, groceries, copper vessels, turbans, women's robes, blankets Europe cloth, wool, hides, paper, and stationery. Besides shops, along the Aditvar and Sadabazar roads, people sit by the road-side offering things for sale. The sellers are generally women of the Kunbi, Mali, and Koli castes who offer plantains and other fruit, vegetables, sugarcane, mangoes, oranges, lemons, grape, and melons. Besides, generally in the mornings, at several street-corners in Aditvar, Budhvar, and Sadabazar stand groups of poor Kunbis and Kolis with bundles of grass, and others chiefly Thakurs with firewood faggots. In addition to the daily supplies on Sunday the market-day about 2000 people, chiefly Kunbis Kolis and Thakurs, come to the town. There are two markets, the old market in Aditvar ward which is held on either side of the main road, and the Ovans' Market, a broad open space along the north wall of the kot or fortified enclosure in which are the mamlatdar's and other Government offices. At this weekly market all articles of daily use in the town are sold in large quantities, especially fruit, vegetables, and field produce. Merchants from different parts of the Junnar sub-division, and from Ahmadnagar, Akola, Rahuri, and Sangamner, bring large quantities of grain and coarse cloth, and Kathodis and Thakurs from the Konkan bring timber and wicker-work baskets. Except the grainmerchants they come with small tents. Goods are brought in carts and on bullock donkey and pony back. The marker is brisk and busy from January to April when the late crops are harvested and ready for the market, when revenue instalments are paid, and the people lay in provisions for the monsoon. Supplies fall off in the rainy season and the

market is dull.. The medium of exchange are silver and copper coins and shells, eighty shells for $\frac{3}{8}d$. ($\frac{1}{4}$ a.). The copper coin is called *shivrai* and is said to date from Shahu (1707- 1749). There is no barter on market days. In the smaller outlying villages barter is resorted to by the Konkan is if any of their goods are left unsold and if they are in want of daily necessaries. The chief articles bartered by Kolis, Konkan is, and Thakurs are *nagli*, rice, baskets, oil, onions, and salt; The people with whom they barter are Malis, Telis, and Vanis.

Trade,

The origin of the importance of Junnar as a trade centre was its nearness to the Nana pass which, in former times, at least from as early as about B.C. 100, was one of the chief highways of trade between the Deccan and the coast. The pass can at best never have been easy. Even if at one time the rough slippery pavement was a flight of steps the pass must have been difficult for laden bullocks and almost impassable for any beast of burden larger than a pony. It can never be made fit for wheels, and as other routes are provided with easy roads the trade of Junnar and of the Nana pass becomes more and more local. In the fair season considerable numbers of pack animals may be seen, ponies bullocks and donkeys, chiefly the property of Musalmans and of Hindu oilmen, potters, and washermen, carrying millet and rice eastwards to Junnar, or bringing salt fish, cocoanuts, salt, and rice from the Konkan coast. [The following details, noted in going from Junnar to Ghatghar at the head of the Nana pass on the 28th of December 1882, give some idea of the amount and the character of the present trade: Four or five bullocks belonging to a Pardeshi and driven by a Teli going west empty to bring from the Konkan salt and cocoakernels and nuts a donkey driven by a Belda'r going east with local millet; a bullock driven by a Musalman going east with dried fish from the Konkan; five bullocks driven by a Teli going west with potatoes to the Konkan; two Musalman's bullocks going east with local rice; a Musalman driving ten bullocks east with Konkan rice; a potter driving eleven donkeys east with local rice; a Musalman going east with a pony load of nachni; a washerman with eleven donkeys and one pony going east with local rice; a pony with glass bracelets from the Konkan; a potter going east with eighteen donkeys laden with local rice; a potter with twenty donkeys passing east with local rice; and a potter with eleven donkeys passing east with local rice.] There is also the more purely local traffic of taking droves of sheep and goats and great basket-loads of vegetables and other garden produce from Junnar and the villages round to the Konkan villages and country towns with weekly markets. There still remains to Junnar, what along with its excellent climate must always have told strongly in its favour as a capital, the rich garden and other lands to the east and south. This rich tract still supplies the chief trade of Junnar, field and garden produce which is sent in carts chiefly about forty-two miles to; Talegaon station on the Peninsula railway, along a route which the Shelarvadi and Karle caves suggest was a main line of traffic about 1800 years ago in the days of Junnar's greatness. The chief trade is in paper, women's robes, blankets, and rice. Exports consist of paper, rice, women's robes, potatoes, plantains, onions, chillies, myrobalans, wheat, gram and millet, molasses, blankets, sheep, and horned cattle. The imports are salt, cocoanuts, dried fish, rags for paper, clothing, oil, grain, metals, groceries, stationery, timber, cotton and silk yarn, country blankets, bangles, bullocks, cows, buffaloes, and sheep. The chief traders

both importers and exporters are Vanis, Kunbis, Musalmans, Bohoras, and Kasars. Except the donkeys and ponies used for the Nana pass traffic carts are chiefly in use. With better roads and a brisker demand trade is growing.

Capital.

The chief men of capital in Junnar are local Brahmans and Gujarat Vanis, Shravaks or Jains by religion, and a few Marwar Vanis also Shravaks. There are also some old grantholders and owners of land, chiefly Musalmans; retired Government servants, Brahmans and Musalmans; some barbers traders and contractors who have made money in Bombay; and some successful oilmen and cloth and grain dealers. The imported cloth trade is chiefly in the hands of Gujarat Vanis and the local cloth trade in the hands of Salis, Shimpis, and Koshtis, and the leading grain-dealers are Marwar Vanis. Of moneylenders several are Musalmans and a few are Hindu craftsmen Telis, Salis, and Hajams. Traders, chiefly Marwar Vanis, also lend but the chief money lending class in Junnar are the Brahmans who have 150 rich houses, one hundred and forty of them Deshasth and ten Konkanasth or Chitpavan. They lend chiefly to Kolis, Kunbis, and Thakurs.

Crafts.

The chief local crafts are the handloom-weaving of women's robes and turbans and the making of paper. The haudloom-weavers of women's robes are Hindus of the Sali and Koshti castes. The Salis, of whom there are sixty houses, live in the north-east of the town in Chandipura, Kadarpura, Khalilpura, and Shukravar peth. The Koshtis live in Khalilpura and Budhvar peth in the north of the town. They are between thirty and forty families who came from Sangamner in Ahmadnagar about thirty years ago. The loom is simple with only two heddles. There is nothing peculiar about it except a stretcher or karsali which is placed by the weaver in front of him. It stretches the web breadthways and forms a support against which the reed or phani is pressed to bring the warp-thread home. The yarn is imported from England; the red comes dyed and the dark is dyed in Bombay. The robes are plain without ornamental borders. Almost all are used in the town; very few are exported. The weavers are generally labourers paid by the piece by men of capital, chiefly Brahmans and Gujars and a few Salis. The rates of piece-work vary from 1s. 3d. to 4s. (Rs. \% -2) representing 7 \(\frac{1}{2}\)d. to 9d. (5-6as.) a day. Except during part of the rainy months (July-October) work is constant all the year round. In the same quarter of the town as the Koshtis are about eighteen houses of the Musalman handloomweavers called Momins. They make turbans and borderless sadis on a small loom. The turbans are generally red and ornamented with a border of gold thread. The weavers are almost all employed by men of capital. They are paid by the piece at the same rate as the Koshtis. The turbans are sold in the town and the outlying villages or sent to Akola, Poona, and Sangamner.

Paper Makers.

A little to the north of the Koshtis and Momin weavers are the quarters of the Musalman paper-makers or *kagdis*, who have about a hundred dwellings and forty-two working

houses. The families have been settled in Junnar apparently since Musalman times. The paper which is smooth and glossy is sold at 6d. to 1s. 6d. (4-12 as.) a ghadi of 240 sheets. It is used in Government offices for envelopes and by native merchants for account books. It is chiefly used in the native states and is largely exported to Poona and Sholapur. Some of the paper-makers are independent traders, others borrow chiefly from Gujar moneylenders. According to the nature of the work the men earn 1 ½d. to 6d. (1-4 as.) a day. Except in monsoon floods when the river water is muddy, the work is steady.

Blankets.

Country blankets are woven in the Budhvar and Shukravar wards by about thirty-five families of Dhangars and Hindu Khatiks. The blankets are sold in the town and in the Thana villages at the foot of the Sahyadris.

Municipality.

The municipality, which was established in 1861, had in 1882-83 an income of about £512 (Rs. 5120) chiefly from a house-tax, and an expenditure of about £195 (Rs. 1950). The municipality has borrowed £3300 (Rs. 33,000) to build a reservoir to supplement the existing water-supply.

Water Supply.

The town is supplied with water partly from the Kukdi but chiefly by water brought in earthen pipes from three wells. It is received in eighteen cisterns measuring on an average about twelve feet by eight, each with a pipe through which the water flows. The wells are one called Barabavdi or the Twelve Wells close to the south of the town which feeds twelve cisterns, and two at the base of Shivner hill which feed six cisterns. The two wells, which are partly built of Hindu temple stones, are near each other to the west of Shivner hill and joined by an underground channel. The cisterns hold water for eight months. In the hot months (March-May) the supply in the well runs short and sinks below the level of the pipes, and the water has to be raised by working Persian wheels. The new reservoir is being built to the west of the town. The water-works are of Musalman construction probably older than the seventeenth century. A few cisterns, built by the municipality and private persons, are kept in repair by the municipality. The Barabavdi, which was private property, was bought by Government and made over to the municipality.

Objects.

The town has of public offices a mamlatdar's, subordinate judge's, police, forest, and registration offices, a municipal office, a dispensary, and a Government and a mission school. Most of the public offices are collected in the Syedvada in the south-west of the town in or near the walled enclosure or garden which is known as the *kot*. This, which is a Musalman work, encloses an area 300 yards from north to south by about 220 from east to west, like a great garden with several; fine *pipal* and banian trees. The wall, which varies from sixteen to twenty feet high, is strengthened by fourteen towers twenty-five; to

twenty-seven feet higher, of which four are in the corners, three each in the north and east faces, and two each in the south and west faces. [The tower to the north of the gate is called Phatak, that in the south-east corner Kangara, and that in the north-west Chauk.] The wall is of rough stone below and white mud above, and the towers are some of them of white mud and others of brick either sun-dried or fire-baked. It is entered through a strong gateway in the east face. Inside, the chief buildings are the mamlatdar's office towards the north of the enclosure with two wings, an east wing for a lock-up and a west wing for a record-room. To the east is a small forest office and to the north is the office of the chief constable. To the south is the munsif's court and further west is a dwelling house interesting as having been from 1784 to 1795 the place of confinement of Bajirav (1796-1817) the last of the Peshwas. Behind are the remains of an old Musalman bath or hamamkhana and to the south is a ruined mosque. Under a tree near the mamlatdar's office is an old carved stone, and in the west wall of the tower to the south of the entrance gate is a stone with some Marathi writing.

Outside of the gate on the right is the Government school, a large modern one-storeyed building. Across the road is the dispensary and a little along the road to the north on the left is the Mission girls school. The dispensary which was established in 1869 treated in 1883 nine inpatients and 6392 outpatients at a cost of £76 8s. (Rs.764). The post office is about 380 yards to the north, and the municipal office is at the west end of the Sadar or chief bazar. In the south or street wall of the municipal office is a small tablet with a Persian inscription dated H. 1049 that is A.D. 1639.

The mission bungalows, in a large enclosure in the north-west of the town, are plain one-storeyed buildings, well designed, and of good size. The bungalow to the north-west is generally occupied by the resident missionary, the other is usually empty. About 150 yards to the west of the bungalows is a small graveyard with a few Christian tombs. [On two of the tombs are inscriptions.]

Gates.

The *kot* is almost the only part of the old fortifications which is at all in repair. About half a mile to the south-west of the *kot*, just under Shivner, is a space about 640 yards by 500, surrounded by a ruined mud wall known as the Juna Baitkala. Of the walls which once surrounded the town few traces remain. Beginning from the east and going round by the south and west to the north the walls had twelve gates: Hatti, Phansumba, Lal-ves, Phatak, Ovan-bazar-ves, Aditvar, Kathvar, Fakirpura, Otur, Delhi, Agar, and Nagjhiri. Two of these, Otur and Phansumba, are in good repair; six, Aditvar, Agar, Fakirpura, Lalves, Nagjhiri, and Ovan-bazar, are in ruins; and of the remaining four Budhvar, Delhi, Hatti, and Phatak no trace is left. The Otur (18'x 10) and Phansumba (30'x12) gates are built of stone masonry. Over the Phansumba gate is a small room reached by a flight of steps. Of Aditvar (16' x 10'), built of stone and mud, the walls remain and of Agar traces of the stone walls are left. Fakirpura (17'x7') was built of stone and mud, Lal-ves (15'x 8) of stone burnt brick and mud, and the Ovan-bazar (16' X 12') entirely of mud. Of Nagjhiri only two stone walls remain. In Sepoy-mohalla, in the south of the town along the north bank of the Lendi stream, are remains of the wall. There is the Lal Darvaja or Red Gate, a

square wooden door with old carved Hindu stones in the side walls. The walls are about twenty feet high, rough stone for the first six feet and then sun-dried brick and white earth. To the south of the gate was a dam, and another dam some distance further made this part of the stream bed or moat fit for boats. Of the old fortified mansions the most notable is in Mangalvar peth. About 230 yards north-east of the municipal office on the left is a large enclosure entered by an old gateway with a wall of white earth and sunburnt brick. The place belongs to the Nawab of Belha, twenty-one miles south-east of Junnar, who now lives chiefly in Surat and is deserted and empty. An inscription over the entrance shows that it was built in H.1033 (A.D.1622). Except the Buddhist caves (A.D. 100-200) and the Yadav cisterns on Shivner (1050-1200) of which separate accounts are given, there are few old Hindu remains. Carved stones and pillars are found occasionally either lying by the roadside or built into the walls of Musalman tombs and mosques or of modern houses. The style of ornament shows that they belong to both Brahman and Jain temples and the style of carving is considered by Dr. Bhagvanlal to vary from the ninth to the thirteenth centuries. [The chief stones noted were: In the south-west of the town in the kot or citadel a broken pillar, and a few carved stones in the kot wall; some carved stones by the roadside close to the mission school; the pillars near the Hemadpanti well carved stones in the Lal gate in the south and in several houses near; a pillar and a carved stone outside of the east gate; at Ambapur on the way to Afiz Bagh a small temple of Maruti with several finely carved stones, among them a row of elephants from a frieze on the Elephant gate whose site a little to the east is still marked by two elephants; in a culvert a little further east; and in Musalman tombs on the way to the Manmoda hills.]

Old Wells.

Besides these fragments are three wells in the old mortarless Hindu style known as Hemadpanti. About 200 paces to the north-east of the mamlatdar's office, near a great banian tree whose roots are ruining it, is an old step-well of large black stones built without mortar in the Hemadpanti style. In the enclosure at the mouth of the well are some old pillars divided into four-sided eight-sided and round bands, broken by the pointed lines of a pyramid ornament, In the south of the town, about 370 yards from the Lal gate, in a large uncared-for garden or orchard, is the Kundal Bavdi or Round Well, a large well of great dressed stones fitted without, mortar. It is entered from the south by a flight of steps which runs about half-way to the water and then turns to the west. About a quarter of a mile to the north-east is Kavlva's well, a rough work of large plain dressed stones put together without mortar. It is entered by a flight of steps from the east.

Temples.

Of modern Hindu temples Junnar has about sixty, two of which an Jain. Of the Brahmanical temples, which are also used as rest houses, seven are well managed and enjoy Government grants of about £30 (Rs. 300). The rest are poor, many of them falling out of use for want of funds. The chief temples are of Panchling Ganpati, Pataleshvar, Uttareshvar, and Thakurdvar. The Panchling temple is at the foot of Shivner hill about half a mile west of the town. The temple with a hall and a shrine has a dome painted with tigers, lions, and Hindu gods. The temple enjoys a yearly grant of £6 (Rs. 60) and was

built about 1800. Attached to the temple is a rest-house, two cisterns, and a filled-up well. Ganpati's temple in Aditvar peth, at which offerings are made in all thread-girding and marriage ceremonies, is said to have been built about 1820. Uttareshvar temple lies half a mile east of the town on the Kukdi, and is approached by a flight of stone steps. It is like a one-storeyed dwelling house with a tiled roof, and, as it is surrounded by fields, it is pleasantly green in the hot weather. Pataleshvar temple is a small underground shrine (12'x 10'), approached by a flight of steps, on the north or left bank of the Kukdi, about a mile north of the town. The temple enjoys a small Government grant. Thakurdvar temple, dedicated to Krishna, is a domed building on the Kukdi, half a mile north of the town. All the other temples are like ordinary dwellings. They are poor, some not able to afford even a night light. Only Brahmans worship in the Panching temple; in the other temples all Hindus except Jains.

Of the two Jain temples one is in the Budhvar peth and the other in the Phansumba ward. The Budhvar peth temple, which is dedicated to Parasnath, is large and rich, a three-storeyed building in the dwelling-house style with a gable roof and surrounded by a brick wall seven feet high. The first storey is used for daily religious meetings which are attended by about fifty Jains out of the Jain community of 415, chiefly Gujarat Vanis cloth-dealers and moneylenders. The second storey, which contains the shrine with a naked image of Parasnath, has a middle hall and two wings. The floor is paved with coloured marble and the walls have glass-covered paintings of Jain gods. The ceiling is of carved teak and the shrine doors are lined with silver. The third storey is used as a storeroom. Attached to the temple is a courtyard (48' x 17') paved with well-dressed stones. The yard has a well and a bathing place. The temple was built by the Jains of Junnar at a cost of £3000 (Rs. 30,000) and is maintained by a managing committee from offerings in grain and cash. The temple has a paid ministrant who reads and explains the holy books.

Musalman Remains.

The chief Musalman remains are mosques and tombs, a large prayer wall on rising ground to the south of the town, and the fine mansion in the Afiz Bagh. Of the mosques the chief is the Jama Masjid or Public Mosque. It stands near the middle of the town a little to the east of the kot or citadel. The outer door, with an inscription over it dated II. 1235 (A.D. 1818), is modern. In the mosque, which measures sixty-six feet by fortythree, are three rows of carved masonry pillars, apparently old Hindu, with in each row six pillars and pilasters. For seven to nine feet from the ground the pillars are four-sided, and then there is an eight-sided belt, and then three rows of cornice end in square capitals which support a very massive timber roof with in the east, front deep finely carved eaves and flying brackets. Except on the gate there is no inscription. To the east is a shady yard thirty paces by thirty-five with a well and cistern and to the south is a rest-house. Of the other mosques, one in good repair to the south of the town may be taken as a sample. The Roshan Mosque, about thirty yards to the south of the Lal gate, measures 42' by 19'. It is entered from the east through a pointed arch which fills the whole east front. Inside are three domes resting on two eight-sided pillars, a prayer niche in the middle of the west wall, and a roof hollowed in diamond-shaped recesses. Along the top of the east front runs a plain stone eave supported by stone brackets. About sixty yards to the east is a

domed tomb, 7' 6" by 16' and 14' high called the Mokarba. The tombs have almost all square bodies of stone masonry the sides either with open-peaked arches or masonry pillars. The square bodies are capped by brick domes, some of them round and others pointed. The following are the details of the Saudagar Gumbaz or Merchant's Tomb, the finest Musalman building in Junnar.

Merchant's Tomb.

On a raised plot of ground in the centre of a raised enclosure, about a mile to the east of the tomb, is a large Musalman tomb, the chief trace of Musalman wealth and power in Junnar. It is known as the Merchant's Dome or Saudagar Gumbaz. The building has a body about fifty-two feet square of plain stone masonry nearly thirty feet high, a heavy brick and stucco cornice several feet deep, and a large round dome which rises about twenty feet above the body of the building. About twenty feet from the ground a plain band of masonry, about six inches broad, divides the body of the building into two parts or storeys, an under-storey about twenty and an upper-storey about ten feet high. Each of the four fronts of the under-storey is divided into three rectangular recesses about 18'9' high 11' 5" broad and 2' deep, separated from the ground by a plinth or band of masonry about 1'9" high by 4" deep. The central recess in the south face is surrounded by a belt of simple carving about six inches broad; the other recesses are plain. Inside of each rectangular recess are two recesses with pointed arches, the outer arched recess measuring 16' 5" long by 10' 2" broad and seven inches deep, and the inner recess measuring 15' 5" high, 9' broad, and 1' 2" deep. Except in the middle of the south and in the middle of the east face, where there are doors, the only ornament in these arched recesses is a belt of simple carving about a foot broad that crosses them about nine and a half feet from the ground where the spring of the arch begins. There are also two small round carvings of flowers on each side about a foot above the belt, On all four fronts the details of the outer rectangular recess and the two inner arched recesses are the same except at the two entrances, in the middle of the south face and in the middle of the east face. In the inner arched recess in the middle of the south face is a plain doorway, 6' 4" high by 3' 6" broad. Over the door two carved brackets support an overhanging band of stone about a foot broad. On the wall, sheltered by the overhanging stone, is an Arabic inscription in three pieces of two lines each. About a foot higher is a window (4' 3" X 3' 5") with a pointed arch filled with open stone tracery, a large central star or sunflower above, and two bands of three stars each below. On either side of the central star are short Arabic inscriptions. Below the window is a belt of simple carving and on each side are three belts of carving. Except two carved grooves the wall on each side of the door is plain for about four feet Then, about four feet from the ground, the corners of the arched recesses are carved into pilasters with three hourglass-shaped compartments separated by squares of tracery. There are inscriptions at the tops of the outer and inner pilasters on the right side and of the inner pilaster on the left side. Outside of the pilasters a band of tracery surrounds the rectangular recess. In the threshold is a line of carved stones.

In the upper storey in each of the four fronts are five rectangular recesses about seven feet by five with in each a double-arched recess, the corners of the recess being cut further back below the spring of the arch than above it. Over the rectangular recesses run two bands of stone carving, each about six inches broad. Above the carving is the heavy cornice, whose bricks, showing through the weather-worn stucco, have a mean and ragged look.

Except that no belt of tracery surrounds the central rectangular recess and that the door is smaller and plainer, the east face is the same as the south face. The door has a pointed arch and measures eleven feet by four. Besides the belt of carving that crosses the large arched recesses, a belt runs inwards along the sides of the door at the spring of the doorarch. Above the rectangular recess are a level and an upright belt of carving and an inscription on either side of the upright belt. The north and west faces are the same as the east face except that they have no doors.

Inside the tomb measures 35' 10" east and west by 33' 7" north and south. The inner walls are eight-sided with, in each side or face, an outer and an inner pointed arched recess. The height of the outer recess is about 19'9" and the depth eight inches; the inner recess is about ten inches lower and a foot deeper. About a foot above the points of the arched recesses wooden beams, perhaps originally the supports of a carved wood cornice or screen, stand out all round about four feet from the wall. About six feet higher in each face, three rectangular panels contain niches with pointed arches separated by plain pilasters. Where the eight corners of the main building turn into the base of the round dome a small carved bracket supports the masonry that rounds off the corner. Above the brackets, at the base of the dome, a circular belt of letters is cut in stucco about two feet broad. Above a stucco cornice about three feet broad is separated into panels by eight pillars, one over each of the brackets. Above the cornice, corresponding to the centre of each of the eight faces, is a round ornament of stucco tracery. From this the dome rises about twenty feet higher, plain and round. Of the eight faces or sides of the building, the four to the north east south and west have either doors or door-like niches. The other four to the north-east, south-east, south-west, and north-west are semicircular recesses about seven feet deep with five sides rising to a pointed dome. The walls of these recesses are plain, except that about seven feet from the ground they are crossed by a belt of fivepeaked ornaments like mitres with flowing fillets about two feet broad. About a foot above the mitre peak runs a slight ornamental belt or carving. At the foot in the back wall of each an opening, about 2' 9" x V 9", leads to a small chamber or store-room.

In the four other sides are doors or door-like recesses. In the west face in the inner arched recess is an oblong recess (10' 4" x 5' 10") and inside of the oblong recess an arched recess (9' 2" x 4' 4") About four and a half feet from the ground, the corners of the inner arch are cut away, and, a foot below, are carved into pilastert with hour-glass or water-pot sections separated by square blocks. The recess is three feet deep. The lower part is in three faces each carved into the round-topped prayer niche pattern about 4' 6" high Above are two bands of the Kuran, then a half dome in four faces with a belt of tracery, and a band of the Kuran. The face of the rectangular enclosure above the prayer niche is carved with letters and tracery, and above the rectangular recess the face of the inner-pointed arch has seven level bands of writing and two lines at each side running up and down.

In the north face within the inner arched recess is an oblong recess (4' 7" x 6"). Within this are two arched recesses, the outer 13'X 6' and 1' deep and the inner 12'X 4' 2" and 1' 4" deep. In the back wall, about eight feet from the ground, enclosed in a rectangular block of tracery, is a lamp-niche (2' 9" x 1' 9") in the rounded *mehrab* or prayer-recess shape. A belt of carving runs across the arched recess about 6' 9" from the ground, and about 5' 6" from the ground the corners of the rectangular recess are cut away and end in a scroll pattern.

In the east face the rectangular recess and the outer of the enclosed pointed arch recesses are the same as those in the north face. The inner arch forms a doorway 11' long by 4' broad and 3' 2" deep The corner of the outer-arched recess about six and a half feet from the ground is cut back about 1' 6" and ends in a double-rolled scroll In the south face, inside of a rectangular recess, the same as in the north face, is an inner arched recess 13' 10" high. The upper part is a pointed window (4'3"x3'5) with open tracery. Under the window is a band of plain stone about 2' 6" broad, then a door 6' 4" high by 4' 3" broad and 3' deep, the corners of the rectangular recess being cut back about six inches on each side of the doorway ending in a scroll pattern about 5' 4" from the ground.

The floor of the tomb was originally nearly filled with a platform about 27' 4"x 19' 7". The north part, which is 7' 7" broad and 2' 4" high, remains, but most of the south part, which was nine inches lower, has been broken away. In the north part of the platform is a row of eight tomb-stones varying in length from 2' 10" to 5'. The stone *tairis* laid on the tops of the tomb-stones show that all except two are men's tombs. The stones on the south part of the platform have disappeared. There is a separate tomb-stone (4' 10" x 2') opposite the east door. The tomb is used as a rest-house and its floor is covered with ashes and dust.

Afiz Bagh,

About a mile to the east of the Merchant's Tomb and two mile to the east of the town is the Hafz or Afiz Bagh. Its unfailing supply of water, fine trees, and stately old Musalman mansion, make it worth a visit. Its name is variously explained but perhaps the most plausible explanation is one which makes Afiz a corruption of Habshi, the garden and the mansion having, according to a tradition, been in the possession of, if not founded by, an Abyssinian chief. The mansion is an upper-storeyed substantial but not an inelegant building; three balcony windows on the south canopied and supported by somewhat heavy looking brackets overlook a small tank; and the east and west sides have each a bay window. The entrance is on the north, its steps flanked by bay windows like those on the other three sides. The ground-floor roof is arched and ornamented with lozengeshaped mouldings. A little to the west of the garden on the Junnar side is a fine mausoleum locally called dargah or gumbaz which is supposed to contain the tomb of the Habshi founder of the Afiz Bagh. The mausoleum, which is entered on the south and west, has a domed roof and contains nine tombs, said to be those of the Habshi, his wife, six children, and a servant. The south entrance, within an ogee arch, is beautifully carved and pierced; it is flat-headed with pierced work above and sculptured jambs and an inscription above the lintel. The east is a narrow doorway under a pointed arch. The

interior is an octagon and every other octagonal side is embrasured and arched; while the west *mehrab* is covered with texts from the Kuran. The exterior walls form a quadrangular figure; the upper portion of the wall veil terminates in a picturesque-looking brick cornice, consisting of pointed arches resting on tiny pedestals and interlining one another. A small minaret graces each of the four corners of the buildings. In ornamentation the walls are divided into two series of blank and arched windows, the upper series consisting of five and the lower of three windows. The middle of the lower series of the south and east walls has a doorway instead of a window. [The late Mr. G. H. Johns, C. S,]

Shivner Hill.

About half a mile to the west of Junnar the steep rock of Shivner rises over a thousand feet and stretches about a mile across the plain. The hill is triangular in shape, narrowing from a southern base of about 800 yards along a straight eastern and a deeply hollowed western face to a point of rock in the north. Near the south the lower slopes of its eastern face are crossed by a belt of rock forty or fifty feet high, which disappears northwards in the steep slope that stretches to the foot of the upper scarp. This upper scarp begins about 600 feet from the plain and rises from 100 to 200 feet, stretching from end to end of the hill a level-topped wall of black rock. In the upper and lower scarps are two irregular lines of Buddhist caves all of them small and some more like the dwellings of vultures than of monks. Above the level top of the main hill rises an inner summit crowned with a mosque, a tomb, and a prayer wall. To the north the hill ends in a narrow lofty rock scarped and rounded like a ship's stern. The west face is steep, and, in hollows, has a thick sprinkling of brushwood especially to the south-west. The lower slopes are in places broken by belts of rock, and about eight hundred feet from the plain a great wall-like cliff sweeps from the north to the south-east and then round a deep hollow stretches to the south-west. The south-west face of the hill is lower and more broken, and, from about half-way up, is strengthened by outworks and bastioned walls. As on the east side, the crest of the hill which is level in the north rises in the middle in a bare flat-topped ridge, and towards the south-west again falls to the level of the northern scarp.

Shivner is interesting as showing traces of five sets of proprietors Buddhist monks, early Hindu kings, the Musalmans, the Marathas, and the English. During the first and second and probably third centuries after Christ the hill seems to have been a great Buddhist centre. About fifty cells and chapels remain. They are found on all three sides of the hill, but most of them are cut in its eastern face. Besides the cells and chapels, on the upper slopes and on the hill-top, old rock-cut steps seem to show that some of the open water cisterns are as old as the Buddhists. Traces of old rock-cut steps, deeper and broader than the monks' steps, and the four finest water cisterns on the hill, show that before Musalman times the hill was used as a fort by Hindu kings, probably the Devgiri Yadavs (1170 - 1318). The pointed arches of the gateways show that all or nearly all of the fortifications are Muhammadan. And besides the fortifications most of the buildings on the hill top, the Ambarkhana, the prayer wall, the tomb, and the mosque, and probably many of the cisterns are Musalman (1300-1750). Though it was the birth-place of Shivaji there are no certain traces of the Marathas except some repairs in the walls and the shrine

of Shivabai near the top of the southern face. The only signs of the English are a row of olive bushes on the south face and a row of teak trees along the east face of the hill top.

Fort Details.

The entrance to the fort is from the south-west. The way from Junnar lies along a well made road from the south-west of the town across the Lendi stream between some old Musalman tombs and gardens. To the right are the ruined mud walls of the Juna Ghat Killa, a fortified enclosure where the mamlatdar's office used to be held, and behind it the steep slopes and bare scarps of Shivner. To the left is the old garden and favourite camp of the Barabavdi or Twelve Wells and to the south the Manmoda hills. Beyond the Barabavdi the road winds up the bare east face of the Pirpadi pass whose crest is perhaps a mile to the south-west of the town. [Close to where the path up the hill leaves the road is a rock-cut pond measuring twenty-one feet by twelve. Some years ago near this pond were some twelfth century figures which have disappeared, except one group of Mahadev and Parvati in which the clever carving of the snake on Mahadev'a left hand is worthy of notice.] The path up the hill turns west from the main road a little below the crest of the pass. From an old banian tree fifty or sixty yards to the west of the road the south face of the hill is seen stretching on the right in a long line from east to west. At the south-east end the scarp is broken and at no one place is it more than thirty feet high. It is crested by two walls strengthened by towers which run about a hundred yards west enclosing a long narrow belt known as the Jibhecha Pada or Tongue Watch. To the west the scarp becomes higher and less broken and again falls away to the southwest where it is strengthened by a triple line of walls. For the first 200 paces from the banian tree the path lies across a slope of fiat rock. It then begins to rise keeping almost west across the under slopes of the hill. To the left the sides fall gently and to the right the upper slopes rise quickly to a lofty scarp. Two. hundred paces further the path has reached a higher level with rocks in the lower slope, bushes in the upper slope, and trees on the crest. During the next 300 paces (400-700) the rise continues gently with some old *nandruk* trees close by and patches of prickly-pear above. At the foot is the deserted village of Bhatkal, once the market of the fort, the Patil's and the Mhir's being the only houses left. To the right the scarp is divided into two parts, an upper and a lower, and between the two a wall runs from the crest of the bill along the edge of a narrow terrace about 200 paces west to Shivabai's shrine. This outwork is called the Phatak Tower. About 900 yards from the starting tree the path begins to rise rapidly, climbing the hill-side by a rough paved ascent between thickets of prickly-pear. About a hundred paces further (1000 yards) the upper rocks of the hill-side become one sheer cliff. About fifty paces further (1050) is the first gate. It is about 100 feet below Shivabai's shrine, and is covered by the main wall and by a second line that runs from Shivabai's shrine down to the gate. To the left the lower slope is green with babhul and prickly-pear. On the east face of the gate is a rectangular recess about an inch deep, and inside of it a double-peaked arch opening with scolloped waving edges. The rectangular recess is broken at the top. The outer arched recess measures 10' 4" high by 6' broad and 6" deep and the inner arch 9' 6" high by 5' 9" broad. On each side of the door are towers of dressed masonry which are now little higher than the front of the-gateway. The doorway, which is entered by three steps, is 12' 11" deep with an arched roof 12' 3" high. On a plinth 1' 10" high are side-rooms 7' 5" by 5' 8" and

5' 9" high with round arched roofs. A flight of steps on the left formerly led to an upper storey. Inside of the gate on the right the scarp is much lower than it is outside, not more than fifty or sixty feet high. Above the scarp rises a wall pierced for musketry and with one or two bastions with openings for cannon. On the left runs a weak parapet three or four feet high, and below are steep slopes of rock and prickly-pear. Inside of the first gate the path is flat but rough with rocks and exposed to the fire of Shivabai's bastion above. On the left, about 160 paces from the first gate, is the Mang's Tower (16' 7" x 14' 3") with a wall about five feet high and two openings for cannon. On the right, as the scarp is much lower and the rocks are more broken and sloping, the wall has been raised to about fifty feet, part of it being later than the rest. About eighty-five paces further, or about 2295 paces from the starting tree comes the second gateway, called *Parvangicha Darvaja* or the Permission Gateway, in a wall which runs at right angles to the path for about fifty paces up the hill-side with two towers pierced for musketry, and with embrasures for cannon. The gateway, which is 18' 2" high and has two short side-minarets, has an outer rectangular recess and a double-pointed arch, the outer arch 10' 1" high and 7' broad, theinner 9' 6" high and 5'. 10" broad. On each side, level with the point of the outer arch, is a mystic tiger, the tiger on the left with an elephant in its right forepaw and the tiger on the right with an elephant in its right forepaw and two under its hind feet. Over the middle of the door is an elephant with a broken trunk. The door is 6' 3" deep, the top is arched, and there are no side rooms. To the left is a ruined tower. From the second gate a narrow flat path between rocks and a wall runs about eighty paces to the third gateway (2375), which is flanked on the right by a wall with a rough round parapet that runs up the face of the hill. This gate is known as the Hatti Darvaja or the Elephant Gate. The whole height of the face of the gateway recess and outside is 21' 9". On the east face a shallow rectangular recess encloses a double-arched recess the outer 15' 5" high and 9' 7" broad and the inner 13' 5" by 6' 4". In the face of the wall, in a line with the peak of the outer arch, is a circular slab filled with geometric tracery and to the left a tiger. The right face of the wall has fallen. On the parapet above the gate are three stones carved with geometric designs and below on the ground are some of the carved stones that were on the right face of the gateway. The depth of the doorway is seven feet. Twenty paces (2395) between high rocks or thickets pf prickly-pear lead to the fourth gateway, which, from a Musalman tomb hid among prickly-pear on the left, is known as the Saint's or Pir's Gate. A flanking wall climbs the hili side to the right. The Saint's Gate is larger and more carefully finished than the others. It has a total height of 22' 2" and consists of a central and two side faces with a total length of thirty-eight feet. In the central, face is an outer rectangular recess 21' 8" high 11' 7" broad and about four inches deep. In this is a doublepointed arched recess, the outer recess 20' 3" high 11' 7" broad and 1' 4" deep, the inner recess about 18' high 8' 4" broad and 6" deep. Inside of the inner recess a large slab crosses the arch about 11'6" from the ground and forms the lintel of the doorway. On each side of the doorway is a rectangular seat 3' 7" from the ground and 2' 4" broad. The central face is separated from the side faces by a plain outstanding belt of masonry about 2' 9" broad, with two small arched recesses at the level of the middle of the lintel of the doorway. The side rectangular recesses are 15' 5" high and the enclosed arched recess 14' 5" high by 8' broad and 2' 2" deep. To the left of the left side recess is a carved boss of stone. The gateway is 17' deep with a central stone dome. On either side, on a plinth 3' 8" high, is a guard-room 11' 3" x 12', with a dome fifteen feet, high resting on four peaked-

arch recesses. In the back walls are arched niches 3' 9" x 2' 3" and in the side walls smaller arched niches 2' 10" x 1' 7'. Inside are the ruins of houses. On the right is a broken cistern and on the left is a level belt about thirty yards broad covered with pricklypear. Among the prickly-pear is a great grindstone about three feet across. The outer edge of the scarp is strengthened by a low parapet wall. To the right the hill side rises in bare slanting rocks with a high wall and a great outwork in front on the top. For a hundred paces (2495) the path keeps to the west. the last thirty-five paces leading up a paved way with space on the left or south-west where the parapet wall is raised into a line of fortification and runs to a point about fifty paces to the left. At 135 paces (2530) the path divides into a way for horses and a way for men, the way for horses rising by a more winding ascent to the north-west and the men's path climbing the sloping face of rock by a flight of fifty rock-cut steps. This part of the ascent is right in front of a great outwork about thirty-three feet high that runs before the fifth, or, as it is said to be called, Shivabai Gate. After about thirty-five paces the path turns to the left up a flight of twenty steps with the great outwork on the left and another wall in front. At the top of the flight of steps the path passes between walls about twenty feet high twenty-one feet to the west and then six paces to the north. The distance from, the Saint's Gate to the Shivabai Gate is 265 paces (2660). As on the other gate fronts, in the face of the Shivabai Gate, a shallow rectangular recess encloses a double-pointed archway. The rectangular recess is 17' high 9' broad and 2" deep, the outer pointed arch is 15' high 8' 8" broad and 6" deep and the inner arch 14' high 5' 6" broad and 1' 2" deep. Inside of the inner arch is a door of teak strengthened by iron spikes in fair repair. The doorway is about 24' deep, 9' 4" broad, and about 19' to the roof which is flat. At each side on a plinth about 4' 3" high are side-rooms about 8' 8" x 6' 2" with pointed arched roofs about 10' high. Above the gateway was an upper storey now in ruins. Inside of the Shivabai Gate the hill still rises in sloping rocks to an inner wall about thirty feet high, the third of the lines of fortification which guard the, entrance to the fort. To the left an old partly rock-cut path leads to some Buddhist caves and cisterns the edge of the hill-top to the left being strengthened by a wall. To the right of the Shivabai Gate, inside of a parapet wall about six feet high, a path, leaving the way up the hill to the left, runs east about 290 yards along a level terrace to a small arched gateway 12' 4' high. The arch which is 10' 4" high has scolloped edges and flowers and leaves carved on the face. On either side is a rounded pilaster about 6'7" high and 5' 11" apart. Inside of the doorway are side recesses (5' 9" x 2' 10 x6' 5" high) on a plinth 1' 10" high and with arched doors 3' 6"broad by 5' 6" high. At about sixty paces to the east of the inner face of the gate, old Buddhist rock steps and modern masonry steps rise in four flights of two to five steps each separated by stretches of level pavement to the temple of Shivabai. The temple stands on a masonry plinth 15' 10" high 61' long and 25' 9" broad. Inside it measures 27 feet into 21 feet; it has two rows of five wooden pillars on each side and a large shrine enclosed in a wooden lattice-case standing out from the north wall. The hollow in the rock behind shows that the temple stands on the site of a Buddhist cell or hall. [Details of Shivabai's temple are given below pp. 197-199.] To the east, with a broken wall on the left, the terrace runs about 200 paces to the Phatak tower. To the west are traces of a flight of old rock-cut steps leading to two open-air rock-hewn ponds about eighteen paces long by eight paces broad. Near the temple and on the terrace are several *champha* trees, and some pomegranate bushes, *a pipal* or two, and one large tamarind. After visiting Shivabai's temple the way lies back along the terrace to

about forty steps to the east of the Shivabai Gate. Here the path up the hill turns to the left by old worn rock-cut steps between two rock-hewn ponds about sixty-five feet by nineteen. It passes with a gentle slope to the north-east for about a hundred yards and then begins to climb the hill face up rough masonry steps end pavement. Most of the way is covered on the left or north by the battlements of the top line of fortifications and in front by two gateways, the inner over-topping the outer. There is a low masonry wall on the right. At 100 paces more (or about 240) from the Shivabai Gate, and 2900 from the starting tree, is the sixth or Phatak Gate, the approach passing under a wall of rock about twenty feet high covered by a masonry wall about twelve feet higher. The height of the Phatak Gateway is 16', of the rectangular recess 11' 6", and of the inner arched recess 10'; the breadth is 8" and the depth 12' 4" with side-rooms about 6' x 5', and, on the right, an inner room 7' x 7' with arched niches in the three walls. From the Phatak Gate about thirty-nine paces lead up a straight steep path with, on the left, a cliff about twelve feet high and a cresting wall rising from twenty to about thirty feet as it nears the seventh gate called the Kulapkar Darvaja. As in the other gateways the face of this gate has a rectangular recess with an inner double arch. The gateway is 21' high, the rectangular recess 18', the outer arched recess 14' 6" and the inner arch 12' 6". The door is about 6' broad and 30' 6" deep. It has been a double two-storeyed gate and has a guard-room on the left about fifteen feet long. To the left are the remains of buildings and over the gateway is a room with a south-fronting window which is very notable from the lower slopes of the hill. Beyond the sevent gate the path, with a low wall on the right, leads about thirty paces east along nearly the crest of the hill-side to a ruined gateway, twelve paces deep, which seems to have had an upper storey. About thirty paces more, or about 3000 from the starting tree, lead to the hill-top.

Hill Top.

On the hill-top, to the north-east from slightly swelling rocky under-slopes, the central rounded mound of the upper hill rises 200 or 250 feet with steep grassy boulder strewnsides. On the main or lower hill-top to the east are the remains of houses hid by trees. To the north-west are stretches of sloping rock with large rock-hewn cisterns. About thirty yards to the west, with some olive bushes on either side of the approach, is the plinth of a large building known as the Sadar or Commandant's camp. The olives were planted about 1841 by Dr. Gibson, the first Conservator of Forests, who used to spend some months of each year on the top of Shivner. The large building about sixty paces further west is the Ambarkhana or elephant stable. It measures about thirty-eight paces east and west and eighteen paces north and south. Inside it is divided into three lines of seven rooms in each line, each with a vaulted roof on pointed arches 14' 9" by 12' 8". and about fifteen feet high. A steep night of steps leads up the north face, and the flat roof, which is seventeen feet high, commands a view of the whole country to the west and south. Much of the ground near the Ambarkhana is covered with ruins. About a hundred yards beyond the Ambarkhana, the north-west end of the hill is enclosed by a battlemented wall with lozenge-shaped battlements 4' 4" high by 3' broad and 3' 8" apart.

The hill-top forms a triangle of which the south face is the base The length of the-south face is about 820 paces, of the east face about 1100, and of the west face about 1380. In

the centre stands the upper hill-top, a steep mound 200 to 250 feet high, rising sharp from the east and with a gentler slope from the west, and along the north face and in the narrow tongue that runs to the north leaving a considerable belt of nearly level ground. The 820 paces of the south face stretch nearly east and west. Beginning from the southwest end, the first hundred yards lead to near the Ambarkhana, the second hundred yards to beyond the Commandant's house, the third hundred yards to where the path up the hill gains the hill-top, and the fourth hundred yards to the end of the buildings. The next 300 yards are across sloping rocks with some rock-hewn and masonry cisterns on the left, and, on the right, a few young teak trees and a low parapet wall. Beyond, on the right, for the last sixty or seventy paces, at the south-east corner of the hill, an outer line of wall encloses the top scarp in the shape of a tongue known as the Tongue Watch or Jibhecha Pada. The east face runs nearly north and south in a straight line of about 1100 yards. Except in the south-east corner and in the long point that stretches to the north there is little level ground on the crest of the hill, the slopes of the upper hilltop rising almost immediately from the edge of the scarp. The east hill-top, except in the extreme southeast and in the north point, has no cisterns. It has a line of young teak trees running under the shelter of the upper hill, which, like the olives, are said to have been planted by Dr. Gibson. About a hundred paces lead from the south-east corner of the hill to the beginning of the rising ground at the foot of the upper hill-top. Six hundred paces more lead to the north end of the upper hill slopes and about 400 more to the overhanging outwork at the extreme north end of the hill. About the middle of the east face is a short cut to Junnar. This was formerly much used, and, though the path was destroyed by the British, the rock is said to be still scalable by a clever climber. Traces of old walls remain near where the path reached the hilltop. Except there, and at the two ends, the east scarp is so sheer that no parapet wall is required. From the north point the western cliff, which has a total length of 1380 paces, bends with a sharp corner to the south-east, and, forming a deep hollow, turns again to the south-west. Except at the north and the south ends, where it is crested with a wall, the sheer, almost overhanging, cliff defies approach.

Upper Hill.

From the crest of the scarp, except at the north and south where the ground is nearly level, the slopes of the upper hill begin to rise but much more gently than the eastern slopes. The steep bare sides of the hill-top end in a flat summit seventy or eighty paces broad. The upper hill fills almost the whole of the main or lower hill-top except that it is surrounded by a narrow level or sloping belt to the west and south, and that a flat point about 160 paces broad and 400 long runs to the north.

Besides the Ambarkhana near the south-west corner the chief buildings on the hill-top are, on the crest of the upper hill, a prayer-place, and a domed Musalman tomb. At the south end of the narrow flat point that runs to the north is a mosque with a fine flying pointed arch between its minarets, a little further is a round mansion, and at the extreme north an outwork. This overhanging northern scarp has the interest of being the old place of execution. From it at least till as late as 1760 prisoners were hurled. In that year seven Kolis who belonged to the party of Javji a notorious Koli outlaw were seized by Ramji Savant a Peshwa officer at Junnar and hurled down this north scarp. [Details are given in

the Ahmadnagar Statistical Account, Bombay Gazetteer XVII. 405.] There are also about thirty cisterns or rock-hewn ponds of which one is on the top of the upper hill, twenty-five on the main top, of which eleven are in the west side, eleven in the south side, and three in the east side, and five are in the upper slope of the southern hill-side within the outer wall. Several, probably many, of these cisterns are Buddhist, belonging to the times of the caves, that is the second and third century after Christ. The four finest, which are supported on massive pillars and run into the hill-side, probably belong to the times of the Devgiri Yadavs, a little before the Musalman conquest at the close of the thirteenth century. Of these four great under-ground cisterns in the main hill-top, one is in the south top about sixty yards north of the entrance gateway, two Ganga and Jamna are in the west slopes of the hill-top, and one is under the mosque at the foot of the north slopes of the upper hill. Of the Musalman cisterns, which probably include all which are neither Buddhist nor Yadav, two, one in the north point and one near the south-east end, have masonry sides.

On the upper hill-top, besides a rock-hewn pond and some ruined houses, are a prayer wall or *idga*, and a domed Musalman tomb. To the east of the prayer wall is a pavement about twenty-six paces long by eight broad. The wall is about eighteen feet high and is topped with a line of nine battlement or lozenge-shaped slabs ending in two towers with small minarets. In the middle of the wall eight very steep steps lead to a pulpit 9'8" from the ground formed of two big stone slabs together 3' 8" by 4', with two upright slabs at the sides about 1'7" high. The east face of the wall is carved into a central and two side recesses each with an outer rectangular recess about two inches deep and an inner arched recess about 1' 6" deep. The centre rectangular recess is 15' and the centre inner arch 10' 6" high and 7' broad, the side rectangular recess 13' 4" high and the side arched recess 10' 6" high or the same height as the central arched recess; the breadth is 6' 3". In the wall, behind the foot of the pulpit stairs, is an arched door 2' 4" by 4' 8". About fifty yards to the north is a square Musalman tomb with a plain well-dressed stone body, four pointed open arches one on each face, and a rounded brick dome. The tomb stands, on a masonry plinth 25' 3" by 29' 2" and 3' 8" high. It is entered from the south by two stone steps. On the southwest and north the plinth is about 1' 6" broader than the tomb and to the east it is 5' 6" broader. In each face of the tomb is a rectangular recess 13' 10" high 8' 2" broad and one inch deep. In each rectangular recess is a double-pointed arch the outer 12' 6" high, 8' broad, and 4" deep, and the inner, which is an open arch, 12' 1" high and 7' 4" broad. Above the arch is a stone plate about a foot long by nine inches broad with passages from the Kuran and on each side are two carved bosses. Above the rectangular recess runs a plain belt pf masonry, and over it a masonry cornice of thirteen lozenge-shaped or battlement-like slabs with corner minarets. Between the outstanding belt of masonry and the cornice, a line of Arabic writing stretches nearly the whole length of the east face. The inner measurements are 15' 7" by 15' 9". The floor is paved with well dressed stones, and, in, the centre, a stone tomb 2' 3" high rises in five steps from a base 6' 6" long to a top 4' 11" long. It seems to have been a man's tomb. In the sides where the spring begins, about 4 10" from the ground, the corners of the arches are cut back about 3". In each corner between the arches, about 5' 4" from the floor, a centre and two side brackets support a masonry face about 5' 4" broad and 6' high. In each face is a rectangular recess an inch deep 5' 4" high and 3' 6" broad. In the rectangular recess is an arched half dome

about 4' 6" long 3' 2" broad and 2' 2" deep. The half dome has five faces and arched niches carved in the inner side faces. Above is an eight-sided plain cornice about 2' 2" broad. Then about 14' 6" from the floor eight brackets stand out and cutting off the corners support the round brick dome. In the base of the dome is a row of sixteen panels 3' 10" high with pilasters between. Above this is a round plain dome perhaps about eight feet high.

View.

Near the tomb the hill-top commands a wide view. To the east a broad plain broken by a few low hills stretches to distant lines of level-topped uplands. The west and north are full of hills, whose bare sides and under slopes are relieved by the rich groves and garden-lands of the Min valley. To the north-east, almost at the hill-foot, lie the citadel, the brown-tiled roofs, and the scattered trees of Junnar. The town stretches in a long line along the right bank of the Kukdi, the river showing in winding reaches and with patches of bright green garden-land on either bank. To the east of the town stretches a bare plain with a scanty sprinkling of trees, broken by one or two low pointed hills, the remains of the south-east spur of the Suleman range. On the north-east horizon are the high flatshouldered hills of Gidaria and Bhamberi near Udapur in Junnar. To the east are the flattopped hill above the large village of Otur and Gavlia hill in Pimpri-Pendhar village. Further to the right is Ale village hill, its long level outline broken by the gap through which the main Nasik road runs. Below, close at hand to the south-east, stretches the irregular line of the Manmoda hill-tops. To the east, like islands from a great sea, rise from the plain the single hill of Dudhare, and further to the south-east, much like Dudhare in shape, the hill-fort of Narayangad. To the south close at hand is the Suralia hill and to the south-west is the level-topped Chincholi-Parunde range with two peaks of the higher hills of Khed showing behind. A little to the west stretches the richly-wooded garden-land of Minner or the Vale of the Min, and, above the lowlands, to the west rise the bare level ranges of the Kala-Thamba hills with a pass leading to Bhimashankar. A little to the north in the distance are two hills with small square cupola-like tops, the south most of which is Hatej and close to the north the great hill of Dhak, the opening to the A'mboli pass, and the southern top of the range that running north into the Junnar valley ends near the Nana pass in the great hill-fort of Jivdhan. To the north of the hills that bound the Min valley, close at hand the Tulja hills hide all but the south-east point of Chavand and the other hills including Jivdhan, which form the southern boundary of the Kukadner or Vale of the Kukdi, as the broad strath that leads from Junnar west to the Nana pass is commonly but incorrectly called. Nana's Thumb or Nanacha Angtha, the great rock that stands sentinel over the Nana pass is hid, but the low bare hill to the north of the Nana pass can be seen. Further north the broken western face of the Anjanola hills marks the end of the range that forms the northern boundary of the Kukdi valley. The rest are hid by the long lines of the Mhesardi and Mangni hills with the scarp of Hadsar fort showing between them. To the north of the Mangni hills, over the Mhar pass, stand the huge level shoulders and the gently pointed top of Harishchandragad (4691) one of the highest of the Sahyadris, having two or three level layers of trap which have disappeared from the lower surrounding hills. To the north close at hand, across the Junnar valley, are the scarped sides and level top of Hatkeshvar. Behind Hatkeshvar are the row of rounded

tomb-like knobs of the Varhad or Navra-Navri rocks, and to the north-east the circle is completed by the scarped sides and flattened peak of the Suleman or Gane'sh Lena hills.

Flying-Arch Mosque.

To the north, at the foot of the upper hill, is a mosque with a west wall about fifteen feet high whose outer face has fallen. At each end of its east face, about 24 feet apart, minarets rise about twenty feet above the roof. Inside of the minarets, clinging to them for about ten feet, springs a flying arch, which, about fifteen feet above the roof, Stretches to a point halfway between the minarets. To the east of the mosque, entered from the north side, is a court 55' 8" by 17' 2". The mosque, which is of rough stone masonry, has a broken stone eave about two feet deep and a plinth 18" high. The east face is a pointed arch 17' broad at the base. On the right hand, near the top of the east wall, is an inscription and on the left corner it; another inscription slab, but the letters are worn. The inner measurements of the mosque are 16' 7" by 23' 2". In the centre is; a round brick dome, and in the three walls to the south-west and; north are three peaked-arch recesses. the west recess 2' 8" deep and the north and south recesses 3' 8" each. In the west face is pulpit and an arched prayer-niche and three small niches about 4' 4" from the ground. To the east an arched doorway leads, down a steep flight of steps, to an open air pond or cistern about 75' long 20' 8" broad and 20' deep, the upper half of the wall being masonry and the lower half rock. In the south wall are stone stanchions for working a water-bag. Under the mosque, to the west of this outer pond, is a great rock-cut reservoir the roof resting on two rows of two pillars and two pilasters. It is about eighty-six feet long forty broad, and about sixteen deep. It holds about twelve feet of water during the rainy season and at other times about six. The front of the reservoir is a plain rock cave about six feet deep and a veranda with seats 3' 7" broad with a back 1' 8" high and 10" broad The veranda is broken by two central pillars and two other pillars halfway between the central pillars and the end pilasters. The central pillars are about eight feet apart and support a massive slab of rock. The other veranda pillars have plain massive four-sided shafts 3' 10" high with faces 2' 8" broad and capitals 3' 6" broad and 10" deep. In the capital is a central flat belt about five inches broad, and on each side a central band of three inches and two receding bands above and below. The corners of the square capitals end in little horns or knobs. On the top of the capital is a square plate about half an inch thick; above the plate is a neck about an inch and a half thick, and on the neck a bracket capital divided into four faces 1'9" high 2'10" broad-and standing out about 9" beyond the line of the capital. Each face is carved into two rolls. The style of the work is Hindu not Musalman, though it is perhaps not much older than the mosque, being probably the work of one of the later Yadav kings of Devgiri. A night of rock-cut steps outside of the mosque enclosure separate from the flight of Musalman masonry steps shows that the makers of the mosque were not the makers of the cistern.

To the north of the mosque is a ruined Musalman mansion with, in the upper storey of the east wall, the remains of a handsome bracket support for a bow window. Beyond is a large empty pond with masonry sides about eight feet deep. It is thirty-three paces long and about thirty-three paces across at the broadest from which it narrows northwards to a point. Further north are more ruined houses, and at the extreme end of the point

overhanging the scarp is a ruined outwork. A flanking wall runs on the crest of the scarp for some distance along both the east and the west face. Along the west face, about eighty-five paces to the south-west of the mosque, are two great cisterns like the cistern under the mosque. Each has an outer pond about 33' into 18' with three plain four-sided pillars at the back, and inside of the pillars a great cistern hewn thirty or forty feet under the hills, the roofs supported by two rows of two four-sided pillars. These cisterns are known as Ganga and Jamna, and, like the cistern under the mosque, probably belong to the time of the Yadavs. Beyond Ganga and Jamna are several small rock-hewn cisterns, and on the right, about 500 paces from the end, begins the line of fortifications that crowns the south-west corner of the hill.

Buddhist Caves.

The [The cave accounts are contributed by Dr. Bhagvanlal Indrani, Hon. M. R. A. Soc] Buddhist caves in the hill sides round Junnar number 135 with about 170 distinct openings. Of these ten are *chaityas* or chapel caves, and 125 halls cells or separate dwellings many of them with more than one inner cell. Besides these many small cisterns and rock seats have not been numbered. All these caves are in the early Buddhist style and probably range in date from the first to the fourth century after Christ. Almost all are plain and the only object of worship is the relic-shrine or *daghoba* of which there are ten. The caves are fairly rich in inscriptions numbering thirty-five. Most of the inscriptions are short and contain little but the name of the giver and the description of the gift. But seven have some historical interest. Of the whole number of cuttings 138 are without inscriptions. Of the halls cells and cisterns that have inscriptions nineteen have one and two have two; and one of the chapels of the Ambika group in the Manmoda hills has no fewer the eleven.

The Junnar caves may be arranged into five groups. The Manmoda caves, from one to two miles to the south and south west of the town, are fifty in number of which four are chapels and forty-six are dwelling caves. These caves form three subordinate groups the Bhimashankar caves in the south-east, the Ambika caves in the north, and the Bhutling caves in the south-west. The second group is in the side of Shivner about half a mile to the west of Junnar. The Shivner caves include three groups on the east, on the south, and on the west faces of the hill. They include sixty-five openings of which three are chapels and the rest halls cells and cisterns. The third group is about two miles to the west of the town in the east face of the Tulja Hills behind Shivner. This contains eleven caves of which one is a chapel cave and the rest halls cells and cisterns. The fourth group is the Ganesh Caves in the south scarp of the Suleman hills about a mile to the north of the town. This group includes twenty-six caves of which two are chapels, twenty-four halls or dwelling cells, and fifteen cisterns.

Manmoda Caves.

At the south-east end of the Manmoda hills, facing east about 200 feet above the plain, and going from south to north, is a group of Buddhist caves known from the local name of the *chaitya* or chapel cave as the Bhimashankar group. The Bhimashankar caves are

about a mile to the west of the Poona road and about a mile south east of Junnar. The path to the caves lies across rocky under-slopes up a steep but easy ascent. The caves face the single peak of Dudhare which has a tomb of Pir Shah Daval on the top. The view beyond is across a wide plain sprinkled with trees und bounded by level lines of distant hills.

Cave I.

Cave I. is a *layana* or monk's dwelling. It is in two parts, a veranda and three cells in the back wall with plain doorways opening on the veranda. The doorways are nearly equal in size and all appear to have grooves for wooden frames. The first and second cells are nearly equal in size but the third is about two feet broader, and has a two feet broad bench The first cell is about 7' 10" deep 6' 8" broad and 6' 9" high The doorway is 2' 2" broad and 6' 5" high. The second cell is 8' deep 6' 10" broad and 7' 5" high with a doorway 2' 2" broad and 6' 3" high. The third cell is 7" deep by 9' 2" broad and 7' high with a doorway 2' 1" broad and 6' 3" high. Along the left wall is a bench 2' broad and 2' 6" high. The side; walls of the cells vary in length. The veranda is 18' 10" broad 10' high and 6' 3" deep with about six inches in front broken. In front of the veranda are two pillars and two pilasters on which the veranda beam rests. The shapes of the pillars and pilasters are of the style common to the A'ndhra period [The Andhra period is called after the Andhra or Andhrabhritya kings, who chiefly from Paithan or Pratisthan on the Godavari about fifty miles north-east of Ahmadnagar, ruled the whole breadth of India from about B.C. 90 to A. D. 200.] consisting of an octagonal shaft with waterpot bases and capitals. The waterpot at the base rests on a round ring over four square plates each plate larger than the one above it; the waterpot at the capital is inverted with, instead of the ring, an amalaka [The amalaka is the medicinal or lucky berry of the Phyllanthus emblica which when half dry shrivels into grooves.] resembling a cogwheel and over the wheel the plate capital. [The details of the pillars are, beginning from the foot, the four base plates a little ver 2" each, then the circular base of the waterpot 2", the waterpot 1' 10", the eight-sided shaft 3' 8" high and 3 9" round. The distance between the pillars is 4'.] The front of the veranda is plum without any ornament. About seventy feet to the left of cave I. and at about the same level, are the remains of three cells with a broken veranda, apparently a dwelling with three cells.

Cave II.

Cave II. was intended to be a *chaitya* or chapel cave, but as a slit near the ceiling of the present back wall admitted water, the idea of making it a chapel seems to have been abandoned. To catch the water a small cistern has been cut at the left end of the back wall. The cave has an inner hall and a veranda. The hall is 33' 9" deep and varies in breadth from 13' 6" in the back to 11' in front. The left wall is rather slanting, and juts out a little into the hall. The floor of the hall is even, and almost on the same level as the veranda. The ceiling is rough and uneven, varying in height and averaging eleven feet. The quadrangular block, which seems to have been cut from the rock to make the relicshrine or *daghoba*, is 7' deep and 8' 6" broad and rises to the ceiling. Behind it is a passage 3' 7" wide at the back and about 2' on the sides. The flaw in the back wall admitting water appears to have stopped the attempt to carve a relic-shrine. The mass of

rock seems to have been left rough and some time later a sitting female image which is not quite finished and seems to be of considerable age has been carved on the front of the rock. The figure sits cross-legged and its hands and middle are unfinished. It wears large anklets and a necklace with an end hanging like a bunch between the breasts. The ears have large earrings and a plain square crown is on the head. The doorway of the cave is about as high as the ceiling, or 10' 4" excluding the height of its threshold. It has grooves for a wooden frame. The veranda is 9' 10" broad by 4' 7" deep and 12' 9" high, or about 1' 9" higher than the hall. In front of the veranda, in a space 2' 3" deep, are two pillars and two pilasters, and between each pillar and pilaster is a foot high bench with a foot high curtain. On the back of the curtain is the rail pattern. The pillars and pilasters have not the pot and plate capital below but their top ornament differs little from that of the pillars of cave I- consisting of an octagonal shaft with upon it an inverted pot surmounted by a plain ring on which are four plates each larger than the plate below it. A new feature in these pillars is that the narrow eave of the ceiling does not rest on the pillar capital but on a quadrangular shaft over the capital. The cave seems to have been painted. The coating of plaster is still distinct in the ceiling of the hall and still more in the roof of veranda, where the colour remains. The ornament seems to have consisted of round circles between square panels, and the colours used appear to have been red yellow and white. The work appears to have been very poor. As at the Kanheri caves in Salsette, the plaster seems to have consisted of rice chaff and clay. The cave front or facade occupies a space 20' broad by 40' high in which the cave has been cut. Outside the veranda is the eave in which appear the ends of mortices. Over the, eave is the rail pattern, and above the rail pattern in a recess is a round arch, and, within the arch, a deep inner arch. Steps, which apparently led between the pillars have disappeared. Two or three steps also seem to have led to a flat space which communicated by a doorway with cave III. Over this doorway is an inscription of two whole and a portion of a third line. Except the beginning and some traces of the end letters on the right the letters have been lost from the flow of water from above. The first line had twenty letters, the second twenty and the third eleven of which seven remain. The part preserved reads:

Inscription 1.

- (1) Sidham upa'sakasa nagama (sa).
- (2) Satamalaputasa.
- (3) Fata Virabhutina.

This seems to record a gift by a merchant whose name cannot be made out. Perhaps the giver is the Virabhuti mentioned in the third line. Whether the gift was the doorway or cave II. or cave III. cannot be determined. It is probably connected with the chapel cave II.

Cave III.

Cave III. is in two parts, an inner hall and a veranda. The hall is about 18' broad by 15' deep and 7' high. The walls are not equal in length, the left wall being 15' 10" and the right wall 14' 10". In the back it is 18' 5" broad and in front 17' 3". To the right, along the entire length of the wall, is a bench 10" high and 2' 3" broad. The doorway is as high as the hall ceiling that is 7' by 4' 10" broad, and with grooves for a wooden frame. The front veranda, which is 16' 8" broad by 4' 10" deep and 10' 3" high or about 2' 9" higher than the hall roof, is on a 6" lower level than the hall floor. In the left wall a partly broken door opens on cave II. In front were two plain octagonal pillars and two pilasters. The right pilaster is entire and part of the left pillar hangs from the ceiling. This cave differs in shape both from dwellings and from chapel caves. It has no object of worship, the bench on the left is larger than a dwelling cave bench, and there are no holes above the bench for the usual cloth-pegs. The cave was probably a dining hall or *sattra* though dining halls generally have benches on all sides instead of, as here, only on one. side. To the right of Cave III. is an earth-filled cistern, and beyond it, to the right, seems a trace of another cistern.

Cave IV.

Cave IV. about thirty feet below cave III. reached by a broken and difficult path, is an unfinished dwelling intended to have a veranda and cell. The fear of water, from cracks in the veranda roof, has left the cell unfinished with a depth and breadth of about 6' 6" and a height of about 6'. The doorway is 3' wide and is as high as the cell. The veranda is 20' 9" broad by 6' 3" deep and 1' higher than the cell. In front were two plain quadrangular pillars and two pilasters. The left pillar and pilaster remain but the whole of the right pillar and about half of the right pilaster are lost.

Cave V.

Cave V. about sixty feet to the right of cave IV. and on the same level, is not a cave but an artificial opening 26' 4" broad by 12' 8" deep much filled with earth. It may either be a view place or a large cistern of the style of a bathing cistern. Above Cave V. is a similar smaller opening. Above caves IV. and V. and about 70' to the right of Cave III. on a high level, were four cisterns, three of which have broken fronts and look like cells. The first is filled with earth and has a large *pipal* tree growing in front of it. To the right of the front enough of the work remains to leave no doubt that it was a cistern. The second cistern about twenty feet to the right is on a lower level. It is a larger cistern with a broken front and a recess at its mouth with a small bench. In the back wall of the recess is a well cut and well preserved inscription which reads:

Inscription 2.

Sivasamaputasa Sivabhutino deyadhamma podhi.

This may be translated

The meritorious gift of a cistern by Sivabhuti son of Sivasama.'

The recess seems to have been used as a cell and a doorway in its right wall leads to the third cistern which is a little larger than the second but not so deep. Its front also is broken. To the right, on the top, part of the mouth remains. A little to the right of the third is the fourth cistern filled with earth and hidden by a Ficus glomerata or *audumbar* tree.

Cave VI.

Cave VI. is a sitting rest-chamber, which is called a *mandap* or pleasure seat in Inscription 3. It is a recess 9' 10" broad by 4' 10" deep and 6' 8" high, with on three sides the remains of a bench 1' broad by 1' high. To the right a recess probably contained the mouth of a cistern for the use of monks resting in the *mandap*. On the right wall just under the ceiling is an important well cut inscription in three lines. Two or three letters in the beginning of each line are lost; the rest are well preserved. The inscription reads:

Inscription 3,

- (1) [Rano] [The letters *rano* are entirely lost. Looking at the size of the line and of the way in which Nahapana is mentioned in Nasik inscriptions, the two missing letters are without doubt *rano*.] Maha'khatapasa [For *maha* the text has *maha* probably a mistake of the engraver.] Sa'mi Nahapa'nasa
- (2) [a'] [A is half lost and the half that remains is very indistinct. The letters *matya* are dim but not doubtful.] ma'tyasa Vachhasagotasa Ayamasa
- (3) deyadhama [De is entirely lost but as the letters yadhama follow though dim, de seems to be the probable letter.] chadhi [Chadhi is a mistake for podhi. The cistern near the cave leaves no doubt that a cistern was meant in the inscription,] matapocha punathayavasa [Vasa should be vase.] 46 kato

and it may be translated

'The meritorious gift of a mandapa and cistern by Ayama of the Vatsa stock, prime minister to the king, the great Satrapa, the lord Nahapa'na, made for merit in the year. 46.'

Cave VII.

Cave VII. is a small dwelling including a cell and a small open front. The cell is 7' square and 7' high, the front wall 3" less in breadth than the back wall. The doorway which is as high as the cell is 2' 8' broad, and has no grooves for a wooden frame. The open front is 7' 2" broad and 1' 7" deep. Its floor is nearly on the same level as the cell, perhaps an inch lower while the roof of the front is about one inch higher than the cell.

Cave VIII.

Cave VIII. is an irregular row of seven cells. In front is a space with a greatest breadth of 10" 8" in the middle and narrowing at the ends. The cells have a broken overhanging roof

with a greatest breadth of 5', narrowing towards the right, the effect of time. By the side of the first four doorways, in the front wall just under the ceiling, are niches of unknown use about 6" deep and 6" broad. All are dwelling cells as the front and back wall of each has a hole for the pole from which hung the monk's cloth and bowl.

Cave IX

Cave IX. about thirty feet below cave VIII. is a hall with a front. Its sides are irregular, with a greatest depth of 15' 6", and a breadth of 23' 9'. The height is 6' 3", but as the floor is about 1'9" deep in clay, the original height must have been about 8'. The front wall, which has doors, is smaller than the back wall being 19'5". The right wall is 13'8' and narrows towards the front to avoid a slit in the rock likely to admit water. The left wall is 15' 6" long. On the right side, running along the entire length of the wall, is a broken bench about 1'9' high and with a greatest breadth of three feet. In the front wall are two doorways the left door smaller than the right. The overhanging roof of the front space is so broken that it does not look like a front, but the walls on either side are preserved. It is 19' 2" broad by 4', deep. This cave was probably a dining hall or *sattra* as its general plan much resembles that of cave III. About twelve feet to the left is a recess, either a ruined cistern or an unfinished cistern. Between caves VIII. and IX. and about fifty-five feet to the right, a group of cisterns are cut to catch a spring which flows from the hill-top. The first two cisterns, which are side by side, look like recesses and, as their partition wall is broken, they look like a two-celled dwelling. Of the first cistern the front is preserved, and traces show that its mouth was near the left end. Of the second cistern nearly half the front is gone. A little to the right of the second cistern in a recess is the third cistern, its front partly broken, To the right of the third cistern was a rock-cut seat now broken. Further to the right are four other cisterns entirely filled with earth. Above these appear to be some excavations, perhaps cisterns. now inaccessible. About fifteen feet further is an excavation like cave V. It may be a seat or perhaps a large-mouthed bathing pond. Above this are what appear to be four earth-filled cisterns recognizable only by the grass or brushwood growing out of their mouths.

Cave X.

About eighty yards to the right of this group of cisterns, near where the direction of the hill begins to change, is Cave X. The cave faces east-north-east and includes an unfinished dwelling with a cell and veranda. The veranda is finished and the inner cell incomplete, but apparently not from any flaw in the rock. The irregularly round cell is 2' 10" deep. This is the last cave in the Bhimashankar group. Above it is an excavation difficult of access which looks natural though it is artificial.

About fifteen feet to the right of cave X. near one another are five small excavations like cave V. As they are partly filled it is hard to make out whether they are view seats, large open bathing cisterns with broken front walls, or broken cells.

Ambika Group.

About 300 yards from cave X. comes the Ambika group of nineteen caves stretching from east-south-east to west-north-west, and generally facing north-north-east. About forty feet above where the group begins are seven cisterns, two of which hold good water.

Cave XI.

Cave XI., a small dwelling cave, appears to have included a cell with a front veranda. The front wall of the cell and the right and left sides and the roof of the veranda are all broken. The cell, which is 8' 2" deep and 7' 8" broad, is almost entirely filled with earth. To the left are traces of an excavation. But it is entirely filled with earth and blocked by a rock fallen from above.

Cave XII.

Cave XII. close to cave XI. is an unfinished dwelling cave, including two unfinished cells and a veranda. The veranda is finished but the cells are incomplete, especially the right cell. Both sides of the veranda are broken. Like cave XI. it is nearly half full of earth.

Cave XIII.

Cave XIII. consists of a cell and a veranda. The cell is 15' 7" broad by 7' 6" deep with irregular sides. The veranda is 7' 10" broad by 2' 10" deep. Both of its sides and a little of its front are broken. From what remains there appear to have been two quadrangular pilasters with an eave resting on them. The front of the cell is broken, but a little piece of rock hanging about the middle shows that the cave had two doorways.

Cave XIV.

Cave XIV. is a dwelling cave, consisting of a hall with two cells on either side. It is greatly broken. In the back wall of the hall is a large hole caused by a layer of soft rock. The hall is 18' 6" square and 9' high. The side cells, which are nearly equal in size, are 6" higher than the level of the hall floor. The first cell to the left is 6' 10" deep and 6' 7" broad, and the second is 6' 8" deep and 6' 10" broad; the first cell to the right is 6' 10" deep by 7'10" broad, and the second 7' deep by 7' 8" broad. The cells have plain doorways 7' 5" high. All the cells are nearly 7' 5" high and their ceiling is about 1' higher than the hall ceiling. The right front wall of the hall is entire. The left front wall, though broken from below, remains in the upper part and shows that the hall door was 6' broad and as high as the hall ceiling. The hall has an open front 16' 4" broad and 5' 8" deep, as appears from the still preserved top of the left side. The right side is lost. In the back wall of the veranda and to the right of the hall doorway below the ceiling is an inscription in two lines partly broken. The inscription reads:

Inscription 4.

(1) (Ga) hapatiputanam bhatunnam donanka

(2) sa chaugabham deyadhamam.

This seems to show that the givers of this cave were two sons of a householder whose name has been lost in the beginning of the first line. The names of the sons also are lost in the beginning of the second line. The cave is called four-celled.

Cave XV.

Cave XV. is a large cell, 12' 9" deep 12' broad and 8' high. Catch-holes in either wall seem to show that the cave has been used for cattle. Hammer marks show that an attempt has been made to break the partition walls. The door is 4' 3" broad and 8' high, and has holes in the top for a thick wooden frame. The cell had an overhanging eave.

Cave XVI

A flight of steps between caves XIV. and XV. leads to Cave XVI. The old steps have been broken and new steps have been made probably by the townspeople. An image of the Jain goddess Ambika has been carved in the cave and the image is worshipped by the Jains and other people of Junnar, and, after the name of this goddess, this group is locally known as Ambika Lene. The cave is a dwelling, consisting of five cells with a large front veranda. The cells are not cut straight and are of unequal size. Part of the back wall of the veranda beginning with the third cell and part also of the front wall are broken. The first cell is 6'8" broad 7'10" deep and 6'10" high. In the back has been cut a shallow recess for an image or perhaps to make an inner cell. In the left wall is a hole for the monk's clothes-peg. The door is 2' 6" broad and as high as the ceiling. The cell floor is 3' lower than the veranda floor. To the left of the doorway, in a small shallow recess, is a standing figure of a Jain Kshetrapal or Field-Guardian, about 1' 6" high, of the tenth or eleventh century. His left hand rests on his hip and in the right hand is a weapon too broken to be identified. Round his face is an aureole. Near his right leg is a sitting human figure and near his left leg is a dog. This image has been broken probably by Musalmans. To the right of the doorway in a small recess is a broken sitting figure of a goddess 10" high, probably a figure of the Jain, goddess Chakreshvari. On either side of the image are two human figures. In front of each image is a pair of holes in which to lay a board or plank for offerings.

The second cell is 7' 8' deep by 6' 9" broad and 6' 9" high with a peg-hole in the back wall and two catch-holes high up the side walls. The third cell is unfinished because of a soft layer in the left side wall. It is 5' 10" deep by 4' 10" broad and 6' 4" high. Between the third and fourth cells is a recess, which must originally have contained the figure of a Jain god. The plinth for the seat of the god has been made as well as a drain to carry away the water of the god's bath. The fourth and fifth cells were originally separate but the Jains have broken down, the partition, a trace of which appears in the ceiling, and made the two cells into one hall 7' 10" deep by 17' 3" broad and 7' 1" high In the back wall two Jain images sit cross-legged in the lotus position. They appear to have been broken by the Musalmans. The image to the left, probably of Neminath the twenty-second Tirthankar, is 3' high and 2' 5" in the cross-legged posture, and has a three-canopied umbrella, and, on

either side of the umbrella, a broken flying angel with a fly-flap or *chauri*. To the left in a recess were two small standing figures one 1'3" high and the other smaller. Each figure had over the head a serpent hood, or perhaps a badly cut umbrella. The image to the right, also broken, probably by Musalmans, is perhaps of Adinath the first Jain Tirthankar, as above his shoulder are the carved ring-lest by which, in old images, Adinath is identified. The image sits cross-legged 2' 5" high and 2' 3" between the knees. Round the face is an aureole. Above is a three-canopied umbrella of somewhat different shape from the umbrella over the image of Neminath. On either side of the umbrella is an angel with a fly-flap. In the left wall of the hall, in a recess, is Ambika seated under a mango tree. The image is 2' 3" high by 2'.2" broad. The left leg is crossed and the right leg hangs down. Under the left knee is the lion, Ambika's car. Over the left and right knees are two boys, her sons Siddha and Buddha. To the left of Ambika, a standing figure 1'4' high holds an umbrella. Above the mango trees three Tirthankars sit cross-legged, the middle figure larger than the two side figures. This is to show that the goddess Ambika is subordinate to the Tirthankars, though she is regarded as the special guardian goddess or shasandevi of Neminath the twenty-second Tirthankar. Under each figure are two holes probably for wooden planks. From their workmanship, these images appear to be of the tenth or eleventh century, when the Jains seem to have plastered these two cells and the veranda in front of them. Traces of the plaster, which seems to have consisted of thin hemp-like fibres mixed with lime, remain.

In front of all the cells is a broken veranda 49' 10" broad by 7' 2" deep. A wall ran along the veranda in front of caves XV. XVII. and XVIII. This wall, as well as more than half of the veranda floor, is ruined. To admit light into it, each cell appears to have had a door in the front wall, but, except the first door and the top part of the second, no traces of the doors are left.

Cave XVII

Cave XVII. is to the right of cave XV. on a two feet higher level and under cave XVI. It is a cell 7' deep by 7' 8" broad and 7' 2" high. Its back wall and left side remain, though a partly successful attempt has been made to break the left wall. The right wall is partly broken while the front wall and part of the ceiling are gone. In the back wall is a peghole.

Cave XVIII.

Cave XVIII. by the side of cave XVII. and under the veranda of cave XVI. consists of two cells now entirely ruined except the back wall. They are about 5' 6" in front of cave XVII.

Cave XIX.

Cave XIX. to the right of cave XVIII. and under cave XVI. appears to have consisted of a veranda and an inner cell 7' 1" deep by 7' 9" broad and 7' 10" high. Its front wall and

veranda are gone. A door in the left of this veranda probably led to the right cell of cave XVIII.

Cave XX.

Cave XX. is a small plain quadrangular chapel cave. Its floor, which is now much filled with earth, appears to have originally been on the same level as cave XXI. to its right, the great chapel of this group. Its front wall and part of the side walls are broken. The cave probably extended to the pillars of cave XXI. and was 14 deep and 9' 8" broad. The height cannot be ascertained as it is much filled with earth. The relic-shrine or *chaitya* is about two feet from the back and side walls. In shape the relic-shrine is of the time of Gotamiputra II. (A.D. 50), consisting of a toothed belt on a round plinth, the belt surmounted by a strip of rail pattern, and on the plinth a more than three quarters circular dome, and above the dome a capital with rail pattern (now broken but distinct on the back), and on the capital a broken shaft supporting an umbrella cut out of the ceiling. The dome is about 3' high. [It is possible that, like the relic-shrine to the left of Kanheri cave IV. the relic-shrine in this cave may be dedicated to some local monk. The cave could not then be called a chapel or *chaitya* cave as the word *chaitya* is only used for relic-shrines in honour of Buddha while the word for relic-shrines in honour of monks, as the Bhaja and Kanheri cave inscriptions show, is *thupa* or *stupa*.]

Cave XXI,

Cave XXI. is an unfinished chapel or *chaitya* cave intended to be the chief place of worship in the Ambika group. A large cross layer of soft rock, as high as the cave and six feet broad, which runs throughout the rock and appears in cave XIV. about sixty feet to the left, seems to be the cause why the chapel was left unfinished. In spite of this layer of soft rock the excavation seems to have been continued up to the relic-shrine, but a second layer of soft trap behind the relic-shrine seems to have stopped further work. The veranda has been finished, the hall also is mostly finished, but the relic-shrine is incomplete. The rock intended for the relic-shrine seems to have been left unfinished while being dressed; only the tee has been made and the dome appears to have been partly brought into shape. The hall is 37' 4" deep by 16' broad in front. The roof is vaulted on perpendicular walls the height of which cannot be given as the cave is greatly filled with clay washed in during the rains. The doorway is quadrangular five feet broad and apparently about ten feet high. Above is a moulding 13' 7" long and 1' 9" broad. Above the moulding is a recess in which is a horse-shoe arch, and within the arch a vaulted window admits light to the cave. In front of the door a flat-roofed veranda has two pillars and two pilasters in the Shatakarni (B. C. 90- A.D. 300) style with a central octagonal shaft on an Indian waterpot resting on a ring over four square plates, each plate smaller than the one below it. Above the shaft are the pot and the plates inverted, with, over the plates, a quadrangular shaft on which as in cave II. rests the eave of the roof. The left pilaster is lost. The chief interest of this cave are eleven inscriptions in the veranda, many of them recording grants, but none referring to the making of the cave. The grants do not seem to refer to this unfinished chaitya cave but to the monastic establishment which lived in the Ambika group. This cave seems to have been chosen for recording grants because it was empty and unused

The inscriptions are badly cut on a rough undressed surface, but though a little hard to read, most are complete.

Inscription 5.

Inscription 5 is on the right hand pillar in two parts, one on a face to the left of the visitor and the other on the right face. It is hard to say, until the meaning is made out, whether this is one inscription in two parts or two separate inscriptions. The letters are distinct, deep-cut, and well preserved, but no meaning can be got out of them. The inscription seems to be in a foreign language written in cave characters. The inscription is in two parts, the first of which may be read:

(1) Apura'na (5) Va'dhima'.²
(2) Deaka'.¹ (6) Nikava.³
(3) Hamana'. (7) Vancha⁴

(4) Roathi.

The second part may be read

(1) Asa. [Asa may be musa.] (2) Tha'da. (3) Khunesa. [Khunesa may be rinesa.] (4) Ma. [The small cross line after an marks that the writing is complete.]

Inscription 6.

Inscription 6 is on the left pillar on the side facing the inscribed faces of the right pillar. It is in four distinct and well cut lines. As in Inscription 5 no meaning can be made out of the words which are:

(1) Ta'bake. [*Tabake* may be *nabake*.] (2) Keausa. [*Kesusa* may be *keasa*.] (3) Ta'tobho. [The middle letter *to* of *tatobho* may be an engraver's mistake for *chho*.] (4) Badhi.[*Badhi* may be *gadhi* or *sadhi*.]

Inscription 7.

Inscription 7 is in the back wall of the veranda to the left of the moulding on the doorway. The inscription is in four lines faintly cut on a rough surface but distinct. The inscription reads:

¹Deaka may be also read desuka.

²The letter ma is confused by a crack in the rock; it may perhaps be va or mi.]

³*Nikava* may be *nikacha*.

⁴Vancha may be also read voncha or choncha.

- (1) Ga'meshu [The third letter *shu* appears like *pa* in the original as the letters are very nearly alike. It is curious to find *shu* here as the letter *sha* is not generally used in Prakrit.] va'nadeshu [The letter *shu* at the end is also written like *up* but to read *up* makes no sense.] nivatana'ni
- (2) panarasasa [Compare below aparajita in Inscription 10.] palapasa
- (3) deyadhama apajitesuga
- (4) nepayogokahathe da'na- [Dana in the original looks like nana. It is probably an engraver's mistake as, the first letter must be da.]

This records the grant by a man named Palapa of fifteen *nivar-tanas* in Vanada village to remain in charge of a man named Payogoka of the Apajita *gana* or sect. Vanada village may be the modern Vanavdi four miles west of Junnar. Apajita must be a Buddhist sect. The Jains also have *ganas*, one very old sect among the Digambaras is Aparajita which this name closely resembles. [Compare below *aparajita* in Inscription 10.]

Inscription 8.

Inscription 8 on the moulding consists of four long lines on a rough surface, the letters getting larger in each lower line. As the surface is rough and full of irregular chisel marks crossing the letters the inscription is hard to read and is puzzling. It may be read:

- (1). Gedha [Gedha may be gidha.] viha'ra'na [The lower part of ra is much curved and appears like ad but it must be na. Na ought to be nam.] da'na [The original has dana probably for dana. A chisel mark below na makes it look like ku but daku gives no sense, while examination shows that the roughness in the rock has no connection with the letter.] ka'ka (pu) teta [Pu seems to have been omitted after kaka and before tela for Sk. Kakaputrena. This appears to be the name of some place in Junnar, as, at the end, mention is made of a gift of eight nivatanas to the Kakaputiya samaya or the assemblage residing in Kakaputa.] sa'rasavano na'ma vannakaro iya hala'panasa'ya [Panasaya is a mistake probably for pannasaya.] bhoga deyadhama suvanaka'ra seniya.
- (2) Ga'ma Danagara khetramha' chheta ha [The *ha* after *chheta* is hard to understand. It seems to be unconnected with the sentence. If it is taken as a numeral it might represent eight. Still this cannot be right as the attribute *savajatabhogam* is in the singular number and as the figure for eight which occurs in the last line of the inscription is different.] (?) savaja'(ta) bhogam [The *ta* after *savaja* has been omitted probably by the engraver. Without supplying a *ta* the phrase gives no meaning, and the phrase *savajatabhogam* occurs in the Nasik inscriptions. Bombay Gazetteer, XVI. pp. 551, 552 note 2.] nivatana'ni be2 [For *be* 2 the original seems to have something like *pota*; it is a mistake of the engraver as the letters *pota* and *be* 2 are much alike.] deyadhama simita'ya game panakavachhare hala'to karo bha'takasa deyadhama.

- (3). Ga'me madahatalesu [Le looks like *pe* as the letters are very closely alike; but as the *matra* is on the second stroke and not on the first, *le* is better. The middle stroke in *su* appears to be a mistake of the engraver. With the stroke the mark cannot be made out as any letter.] chhetasu lonikamato bha'go satesu panchasu deyadhama simita'ya ola'nathiya a'baka' nivatana'ni be.
- (4). Deyadhama va'niyikasa Da'manadasa.
- (5). Ga'me kisiravalava'yam kheta Viratha'na gharasa puva [pa] se nivatana'ni atha 8 Ka'kaputiya sama'ya
- (6). Mhi.....deyadhama.

'This records gifts in different places by different men to the Gidha Vihara which would seem to show that this group used to be called the Gidha Vihara. The first gift of the duty on fifty ploughs [It was an old custom for every village to have a permanent officer named Gramakuta to distribute ploughs to cultivators and levy a duty upon them (Vatsyayana's Kamasutra, chapter V.). It is to this duty that reference is here made.] is by a dyer named Sarasvana residing in Kakaputa. As ata here is used with Kakaputa it appears that Kakaputa is the name of some place near Junnar where the dyer lived. The second gift is by a guild of goldsmiths of two *nivatanas* in a field in Danagara village. This Danagara village may be Dhangarvadi village five miles south-west of Junnar, if the place Dhangarvadi be not a modern name called after Dhangars. The third gift is by a woman named Simita (Sk. Srimitra) of the rent and duty on ploughs in Panakavachhara village. This Panakavachhara may be the modern Pansarvadi two miles north of Junnar. The suffix vadi is modern and generally used to mean a small village while the name Panasara or Pansar, must have been derived from the corrupt from pana avasara. The fourth gift must be by the same Simita as the name of the giver is not mentioned. The fifth gift is by the same Simita, of two nivatanas of mango groves in Olana village. This Olana village may be Valangaon village seven miles south-east of Junnar. The sixth gift is of a field of 8 nivatanas in Kisirvalava village to the east of Virthanghara. Kisirvalava may be the modern Kusur village two miles west of Junnar. All these six grants have been made to the Kakaputiya assemblage. This seems to show that Kakaputa is the name of some place near Junnar.

Inscription 9.

Inscription 9 is in nine lines in the veranda recess to the left of. the horse-shoe arch. It is faintly cut on a rough surface. It is complete and well preserved. The inscription may be read:

- (1). Kona'chike seniya
- (2). Uvasako A'duthuma
- (3). Sako Vada'lika'yam

| (5). nivisa Kataputake |
|---|
| (6). vadamule nivata |
| (7). na'nide. [This letter <i>de</i> is much spoilt but is probably for Sk. <i>dve</i> . It may perhaps be <i>va na</i> being the preceding letter omitted in the vacant space after in] |
| This is a grant by one Aduthuma of the Saaka tribe, probably a Parthian Greek convert to Buddhism as he calls himself an <i>uvasaka</i> (Sk. <i>upasaka</i>) or devotee. The name of his guild is Konachika, a profession which cannot be made out. The grant is of twenty Nivatanas near <i>karanj</i> or Pongamia glabra trees in Vadalika and of two Nivatanas near banian trees in Kataputaka. |
| Inscription 10. |
| Inscription 10 is in the veranda recess in the back wall to the left of the great horse-shoe arch. It consists of ten lines of which the last cannot be made out. It is cut on a rough surface and care has to be taken both in taking facsimiles and in deciphering as chisel marks greatly confuse the letters. The inscription may be read: |
| (1). Maha'veje game ja'babhati |
| (2). udesena nivatana ni shanuvisa |
| (3). sidhagane Apara'jite |
| (4) narasatani [Narasatani appears to be a mistake for nirasatani (Sk. nirastani).] serasa |
| (5). Ma'namukudasa purato |
| (6). Talakava'dake nivata |
| (7). na'ni tini ll nagarasa. |
| (8) ka di sela ude |
| (9). sena nivata'ni ve. |
| (10) |
| Inscription 11. |
| This records three grants, the first of twenty-six Nivatanas in Mahaveja village for Javabhati [The name of the donor is not given in the inscription. The grant is said to have |

(4). Karanja mula nivatana

been made for the merit of Javabhati. The name Javabhati is unusual.] to the Sidhagana or community of the Aparajita sect. No village named Mahaveja near Junnar can be traced. The second grant is of three Nivatanas at the foot of Manamukuda hill. As there is no particular mention of the person who gives or for whom the grant is made, it is probable that it is made by the same person who made the first grant. Manamukuda (Sk. Manamukuda) must be the old name of the hill which is still called Manmoda. The third grant is of two Nivatanas for this hill by a donor of the city whose name is lost.

Inscription 11 is on the left side of the front face of the horseshoe arch. It is in nine small lines, well carved and distinct, and may be read:

- (1)A'bi, (2)Ka'tati, [Katati may be Kabhati.] (3) Nivata, (4)Na'ni, (5)Va'hata,
- (6). Vacheru, [Vacheru may be Vakharu,] (7)Kasa, (8)Esa, (9). Da nam.

This inscription records the grant of 10 Nivatanas of mango groves by one Vacheru a Vahata. Vahata seems to be a surname.

Inscription 12 is a modern Persian inscription on the front right face of the inner arch. It records the name Mahammad Ali, a name which is also recorded in another Junnar cave but without the date. The date here given is Hijri 988 that is A.D. 1580. It is; probably the name of a visitor.

Inscription 13.

Inscription 13 is on the right side of the front face of the great horse-shoe arch. It is in three lines written lengthwise. It is faintly cut on a rough surface and may be read:

- (1) Seniye Vasaka'rasa [*Vasakarasa* may be *vesakarasa* or *tesakarasa*. It is probably *vasakar* (SK. *vansakara*).]
- (2). ma'se pa'donaduke
- (3). Ka'saka'resu seniyapa'da e[ka]sa. [The original has *padeesa*. *Ka* is probably omitted, which, if supplied, would read *pade ekasa* for Sk. *padaikasya*.]

This records the grant of one and three quarters by a guild of bamboo makers; and another of one quarter by a guild of coppersmiths. The thing granted is not named. It is probably the current coin of the country which the two guilds must have agreed to pay monthly. It is difficult to understand how a guild like that of coppersmiths, who are generally better off than bamboomakers, should make a grant of only $\frac{1}{4}$ or $\frac{1}{2}$ less than the bamboomakers' guild. Perhaps *sapada eka* or $\frac{1}{4}$ is meant to be written for *pada e(ka)sa*.

Inscription 14.

Inscription 14 is in the back wall of the veranda recess to the right of the horse-shoe arch. It is in six lines cut on a rough surface and the letters are much confused with chisel marks. The last two lines are much defaced and are hard to read. The sixth line appears to have some letters like *bhogani* (for Sk. *bhogyani*) but they are indistinct and doubtful. The inscription may be read:

| (1). Ga'me Vala nakesu [There is a stroke on na the third letter which is probably a chisel mark. If it has any connection with the letter, na should be read ha .] kara |
|---|
| (2). jabhati udesena nivata |
| (3). nani barasa ga'mese |
| (4). urakesu nivatana'ni |
| (5) |
| (6) |
| This appears to record two grants and perhaps a third which is lost in the defaced lines. The first is a grant of 12 Nivatanas in Valana(ha?)ka village for the merit of one Karanjbhati. This name is as unusual as Javabhati in Inscription 10. The second grant is of (number lost) Nivatanas in Seuraka village. This grant also appears to be for the merit of Karanjbhati. Seuraka is probably the modern Savargaon about six miles west of Junnar. |
| Inscription 15. |
| Inscription 15 is in the right hand wall of the veranda recess It is faintly cut on a very rough surface and chisel marks greatly confuse the letters. Some lines in the middle are doubtful and in some places letters can hardly be distinguished from chisel marks. The inscription may be read: |
| (1). Avarile va sarita. [Saritadake may be sarikhadake.] |
| (2). dake nivatanani cha, |
| (3). Tarill |
| (4).Ararilesu, |
| (5).Kenivatana'ni. |
| (6) |

(7). Avarile jibubhu

- (8). tika [Jibubhutika may be also read jiputraka as *bu* is a letter much like *pu* and *bhu* is much like *tra* and the letter *ti* is doubtful, perhaps a chisel mark.] udesena nivata.
- (9). na'ni atha ga'me ka
- (10). dakesu nivatana'ni
- (11). ba'ra deya.

This inscription records the grants of Nivatanas in various villages.

Cave XXII.

Cave XXII. is close to the right of cave XXI. It is a dwelling for monks and is well made. It consists of two cells with a veranda. On either side of each doorway is a pilaster and in the corner are pilasters on which rests the beam. The left cell is 8' deep and 7' broad with a grooved doorway 2' 3" broad. The right cell is 7' 9" deep by 7 broad with a doorway 2' 3" broad. Within each cell in the back and front walls are holes for the monk's pole. The veranda is 15' broad and 5' 10" deep with a ceiling about 7" higher than the cell ceiling. Its side walls and front are gone. As the cave is nearly half filled with earth, its height cannot be given.

Inscription 16.

In the back wall of the veranda between the two doorways is Inscription 16, well cut on a dressed surface and well preserved. It is in two lines with, between them, a short line of small letters recording the name of the giver's father which was at first omitted. Above the inscription are some chisel marks showing that an attempt was made to break the wall in search of treasure. The inscription may be read:

- (1) Bha'rukachhaka'nam lankudiya'nam bha'tunam
- (2). Asasamasa putana
- (3). Budhamitasa Budharakhitasa cha bigabham deyadhammam.

In the beginning of the first line is the *svastika* symbol. The inscription records the gift of the two-celled cave by two brothers Budhamita (Sk Buddhamitra) and Budharakhita (Sk. Buddharakshita) sons of Asasama inhabitants of Broach in Gujarat.

Cave XXIII.

Cave XXIII. is close to cave XXII. and consists of two cells and a veranda. Both the cells are 7' 9" deep and 7' 5" broad with a doorway 2' 4" wide. In both cells are peg-holes on the front and back walls. The veranda is 15' 7" broad by 7' 4" deep. The veranda ceiling is about 1' higher than the cell ceiling. Like cave XXII. the cave is more than half filled

with earth. In the back wall of the veranda between the doorways is Inscription 17 in two lines faintly cut on a dressed surface. The letters are distinct. The inscription may be read:

Inscription 17.

- (1) Sayitigahapatiputasa gahapatisa Sivadasasa bitiyikaya
- (2). cha saha pariva'. [After *va* the surface is dressed for about ten letters but there is no writing. The remaining letters must be rasa *bigabham* deyadhammam.]

This records the gift of a two-celled dwelling by the householder Sivadasa a son of the householder Sayiti, his wife and family.

Cave XXIV.

Cave XXIV. close to the right of cave XXIII. is a dwelling of which only the veranda has been finished. There appear to have been two pillars and two pilasters with the roof beam resting on them. The pillars are broken, and the left pilaster is half finished. From the upper capital they appear to be of the usual Satakarni style. The cave has been left unfinished, because in the right hand corner is the same layer of soft stone which shows in the middle of the great chapel cave XXI. The veranda is 18' 2" broad by about 6' 3" deep. Outside the veranda in front, to the left of the left pilaster, is Inscription 18 in ten lines. It is very well cut on a dressed surface. Like the Kuda cave inscriptions the *ikaras* are rounded and serpentine. In the beginning of the first line of the inscription is the Buddhist trident and the *svastika* symbol comes at the end of the last line. The inscription may be read:

Inscription 18.

- (1). Gana' chariya'nam thera'nam bha
- (2). yanta Sulasa'nam tevija'
- (3). nam anteva'sinam thera'nam bha
- (4). yanta chetiyasa'nam tevi
- (5). ja'nam nandanamkana vaka

After yanam dha seems to follow after one lost letter. This lost letter is probably va, the two letters together being vadha (Sk. vriddha, old) meaning the old (in age) Gahapati of

Kothalaki or the respected Gahapati, or perhaps *Vadha* is a proper name. The ninth line is lost, but from the fragments of letters that are left the first and second letters appear to be *sa* whose two top strokes remain. The vacant space for the next letter must have contained *pa*, as the *ikara* of *ri* the next letter follows; after *ri* the lost letter must be *va* and after *va* the two top strokes of *sa* still appear.]

- (7) ya'nam (Vu) dhagahapati
- (8). natuno Nandanaka
- (9). (sa pariva'rasa)
- (10). deyadhamam.

This inscription shows that it was not the custom to cut the; inscription only after the cave was finished but as soon as work was begun and a proper place for an inscription was available. The inscription records a gift (probably of this cave) by Nandanaka the grandson of Vadha (?) Gahapati of the Kothalki family. In the beginning of the inscription something is mentioned about a Sthavira but the connection between the two parts cannot be made out on account of the break in the sixth line. The Sthavira is the Reverend Chaitya who is called a Tevija (Sk. Traividya) and a disciple of the Reverend Sulasa also a Tevija and *acharya* of the *ganas* or preceptor of sects.

Cave XXV.

Cave XXV. to the right of cave XXIV. on a rather higher level is an unfinished veranda with two plain pillars and pilasters in front. Above the pillars, in front of the ceiling, are; imitations of wooden mortices, and above the mortices is the rail pattern. The breadth of the unfinished veranda is 15' 2" and depth 4'. There is nothing important in the cave Caves XXVI. XXVII. and XXVIII. are in a row about thirty feet above cave XXIV. They are numbered from right to left. The way to them is difficult.

Cave XXVI.

Cave XXVI. about thirty feet above cave XXV. is much like it, being a veranda with two pillars and two pillars. The only peculiar points are two benches, on the right and left, of the length of the side walls, as broad as the pillasters and about a foot high. A piece of rock near the left bench remains unworked, and so, also, does the top of the right wall near the ceiling. The pillars also are not dressed. It is nearly finished and the back wall is well dressed, as it would not have been if it were intended to cut further in. It is 15' 4" broad with a greatest depth of 5' 3" and a height of 8'. This and cave XXV. are not dwellings but thought or view seats as they are on a high level with a fine view of the city and the distant hills. To the right of this, at a little distance, is a cistern.

Cave XXVII.

Cave XXVII. is a dwelling consisting of two cells with a recess-like veranda. The cell to the left is about 10' deep and 10' 5" broad. The right and left walls are unequal in size and the ceiling is 7' 3" high. A hole in the right wall leads to the right cell. The doorway is 3' 5" wide and as high as the ceiling, and has holes for fixing the wooden door frame. The right cell is 11' 9" deep by 11' 2" broad and 7' 7" high with a door nearly equal in breadth to the first, with holes for fixing the wooden door frame. On the right side of both cells are holes in the back and front wall for the monk's pole. The veranda is 25' broad and 3' deep. Part of the side is broken.

Cave XXVIII.

Cave XXVIII. about twenty-five feet to the left of cave XXVII. and on a slightly lower level, is a small dwelling including a cell and a small veranda in front. The cave is half filled with earth. The cell is 7' 11' deep by 7' 8" broad with a doorway 2' 8" broad. The veranda is 7' 5" broad and 4' deep. Most of the ceiling is broken.

Cave XXIX.

About eighty yards to the right of cave XXIV. near a fine mango tree, are three cisterns each on a slightly lower level than the other, the lowest containing water. To the right of the lowest is a roughly cut walk, and to the right of the walk are three cisterns filled with clay.

About ninety yards from the three cisterns, on a higher level, are two other cisterns and above the cisterns on a still higher level to the right is cave XXIX. Like caves XXV. and XXVI. it is an unfinished view seat 15' 6" broad and 3' deep with irregular walls. In front are two pillars and pilasters.

About 150 yards further, to the right of cave XXIX. and on about the same level, are four excavations which look like cells. They are all cisterns and look like cells because their fronts have broken away.

Bhutling Group.

About 200 yards to the right, on a higher level than the two previous groups, comes the third Manmoda group called Bhutling by the people. This group goes from south-cast to north-west and generally faces north-east. It is numbered in continuation of the Ambika group beginning from left to right.

Cave XXX.

Cave XXX. the first to the left in this row is a very unfinished dwelling of no special interest. It appears to have been left unfinished on account of water coming from above. The cell is much filled with earth. To the right are three earth-filled cisterns.

Cave XXXI.

Just after the three cisterns conies Cave XXXI. a dwelling consisting of a cell 11' 4" deep by 7' 7" broad, with its doorway 2' 10" broad, and holes for a wooden frame. The height of the cell is about 6' 5" About 1' 2" under the ceiling, on the right and left side walls, are three holes in each wall facing one another.

About eighteen feet above cave XXXI. appears something like a recess but it is inaccessible. To the right of cave XXXI. and on the same level are three cisterns buried in earth and brushwood.

Cave XXXII.

Cave XXXII. is a large four-celled or *chaugabbha* dwelling with two cells in the back wall and two in the left wall. It is in bad order. It is partly filled with earth. The hall is 18' square and 7' 8" high or, leaving 1' 4" for the earth, about 9' high. The first cell on the left side is 7' 8" broad by 7' 10" deep with a broken doorway, and the second cell 7' 6' deep by 7' 3" broad. The left cull in the back wall is 7 5" square with a doorway 2' 3" broad and the right cell is 7' 6" deep by 7' 9" broad. To the right and along the back are benches with the ceiling over them about 1' lower than the rest. The right bench is 2' 5" broad and 2' 9" high and as long as the wall, and the back bench 2' broad 4' 4" long and 2' 6" high. Except the doorway of the right back wall cell, all the other doorways have grooves for fixing wooden frames. There are holes in the right and left walls of all the cells for the monk's pole.

Cave XXXIII.

Cave XXXIII. close to the right of cave XXXII. is a dwelling consisting of a veranda, an inner hall, and cells. It is much, broken and much tilled with earth. The hall is 16' deep and 15' broad. To the right are three cells and to the left two, the one to the left unfinished and the right one broken. There is space for a third to the right of the second cell, but the hall is not finished. In the veranda are two cells, the left one finished and the right one unfinished. The veranda ceiling has been broken and pieces of rocks lie in the veranda. Close to the right of cave XXXIII. is an excavation, the beginning of a cell. Above caves XXXII. and XXXIII. are caves XXXIV. to XXXVII. reached by broken steps between XXXII. and XXXIII

Cave XXXIV.

Cave XXXIV. is just above cave XXXII. It is a dwelling consisting of a plain veranda with four cells in the back wall in one row. All are of the same height and their ceilings are about 1' higher than the veranda ceilings. They are partly filled with earth. The first cell beginning with the left is 7' 3" broad and 7' deep with a doorway 2' 2" wide; the second is 7' 1" broad and 7' deep with a doorway 2' 5" wide; and the third is 7' 2" square with the right side of the doorway broken. The fourth cell is above cave XXXV. Its floor has been broken probably in later times as an easy entrance to the other cells. It is 7' 4" square with a doorway 2' 4" wide. All the doorways have grooves for fixing a wooden frame, and each of the first three cells has holes for the monk's pole. The veranda is plain

34' 5" broad and 5' deep. Part of the roof front is broken but it appears to have had no pillars in front. At the right end of the veranda is an open cell, probably a seat for monks.

Cave XXXV.

Cave XXXV. is a dwelling under the fourth cell and the veranda seat of cave XXXIV. It is in three parts, a veranda, a middle room, and a cell in the back wall. The veranda and room are separated by two plain side pilasters and a rock beam above. The inner cell is unfinished, but the middle room and veranda are well finished. The veranda is 6' 10" broad by 6' deep and 6' high; the middle room 5' 3" broad and 2' 9" deep and 6' 3" high; and the inner cell 4' 10" broad and 4' 6" deep. The ceilings of the middle room and veranda, which are the floors of the fourth cell and the veranda seat of cave XXXIV. are broken.

Cave XXXVI.

Cave XXXVI. is close to the right of cave XXXV. and on about the same level. It is a dwelling consisting of a plain veranda and four cells in the front wall. On the doorway of each cell are horseshoe arches supported on stone imitations of wooden arches. Between the arches is the rail pattern supporting thin stone imitations of wooden mortices whose ends appear under the rail pattern. Above the rail pattern is a semicircular daghoba or relic-shrine on each side of each arch. Above the daghoba is a five-plate capital and above the plates an umbrella. On the same level as the capital, and above the arch on either side, small arches of the same shape as the big arch rest on the rail pattern. Above again is the rail pattern. [The mortices are not cut in the first cell.] On the front face of the first arch is a pattern in leaf and flower which is also found on the arch of a cell of one of the Udayagiri caves in Orissa. The other arch front faces are plain. Under the arches in the front wall, above the doorway, the carving in varying patterns partly resembles that in the chaitya cave III. at Nasik. The first, between arched lattice work on either side has the Buddhist wheel resting on a lotus; the second in the middle has a Buddhist trident and above the trident the pentagonal symbol so common in Buddhist architecture; the third has only the pentagonal symbol, and the fourth has plain arched lattice work. To the left, in the veranda, is a beautiful Buddhist wheel with beautifully carved Buddhist tridents in the rim and a lion between the spokes. The wheel is broken, only a portion on the right is left. It probably rested on a pillar of which a trace appears on the floor. The right wall of the veranda is broken; it probably had a lion resting on a pillar. The first cell is 7' 4" broad 74" deep and 6' 10" high with a doorway 5' high and 2' wide; the second 78" broad by 7' 6" deep and 6' 6" high with a doorway 5' 9" high by 2' wide; the third 7' 3" broad by 7' '3" deep and 7' 2" high with a doorway 5' 9" high and 2' wide; and the fourth 6'4" broad by 7'3" deep and 6' 2" high with a doorway 2 wide. Except the third all the cells have holes for fixing wooden frames and the third has grooves for hinges. All the cells have on the right side two holes in the front and back walls for the monk's pole. The right walls of the third and fourth cells are broken, and, as appears from traces of hammer strokes, attempts were also made to break the right walls of the first and second cells. The veranda is 29' broad and about 4' 3" deep. In the front wall, between the second and third cells, is inscribed the name Mahammad Ali with the date H. 988 that is A.D. 1580.

Cave XXXVII.

Cave XXXVII. close to the right of cave XXXVI. is a cell 8' 7" broad and 8' 5" deep with a plain doorway 2' 7" broad. Its left wall is broken and leads to the fourth cell of cave XXXVI. The left of the veranda is ruined.

Cave XXXVIII.

Cave XXXVIII. is an unfinished chapel cave, the largest in this group. It is close to the right of cave XXXVII but on a lower level the same as cave XXXV. The cave is 30' long and at the outset 12' broad with a gateway 9' 6" broad. As it is much filled with clay its height cannot be accurately stated, but it is probably about 10'. The daghoba or relicshrine is eighteen feet from the gateway. In front of the gateway was a small veranda with a broken terrace. It appears to have been intended to cut on either side of the cave so as to give entrance to the aisles without passing through the gateway. The right aisle is partly finished. One pilaster and two pillars have been cut and on the left recesses have been cut to make two pillars while the passage to the left aisle has also been begun. The three pillars of the right aisle are plain octagons with the vertical wall above them, and above the wall a plain vaulted roof as in Ajanta cave X. A crack in the roof seems to have admitted; water as a large recess has been cut on the right above the gateway from where the water has been drained outside over the terrace. The relic-shrine plinth is plain and circular but it is still rough and the ornament uncarved. The dome above it is older than that of other Junnar relic-shrines. Like the domes of Gotamiputra II. (A.D, 50) it is not much rounded, but is like a bowl with a narrowing mouth., It never had a capital. Above the veranda terrace is an ornamented-; front consisting of a large arch resting on ribs the imitations of wooden rafters. Only some of the ribs are finished. Under the, arch in the back wall is the usual arched window and above the' window a semicircle shaped like a half lotus, the middle of which; represents the calyx and the circle outside the stamen. Round the, semicircle are seven petals. The carving of the seven petals is as follows. In the middle is a standing Lakshmi. On the right is a lotus and on the left a lotus leaf. Lakshmi wears a cloth like a waistcloth and in her ears are large ear-ornaments. Her left hand; rests on her hip and her right is raised in blessing. In the side petals elephants, standing on lotuses, throw water from jars held in their trunks, an ornament common in images of Lakshmi. On one side of each elephant is a lotus leaf, on the other side a lotus bud and above the elephants a lotus. In the next petals on either side are standing male figures with thick armlets and large ear-ornaments and wearing the tasselled turban found on the heads of the male figures sitting on the elephants on the pillar capitals at Bedsa Each wears a *dhotar* and has his hands folded over his head. The attitude is almost as if dancing. On one side of each figure is a lotus bud and on the other side a lotus flower. In the last petal on either side women, in the same dancing attitude as the men, wear thick bracelets, large ear-ornaments, a necklace, a waistband, a waistcloth stopping at the knee, and rings on the legs.

Inscription 19.

In the half circle representing the calyx is Inscription 19. It is in one line well carved in good letters and, except the last letter, well preserved. The inscription may be read:

Yavanasa Chandanam deyadhama gabhada (ra) [The ga of gabhada is distinct, bha much resembles ta in shape, and the letter da is a little broken and spoilt. In the rough surface that follows must have been the letter ra but no trace of it remains. If there were no ra the three letters appear to read gatija as there seems something like a dim ikara over ta. As gatija gives no meaning gabhada(ra) is better.] and may be translated

The meritorious gift of an inner doorway by the Yavana Chanda. The inscription shows that the doorway of the inner hall was carved at the cost of a Yavana named Chanda.

Above the arch on the upper apex was a carving now broken. The remains suggest that it was the common Buddhist pentagonal symbol. To the right is a standing life-size Nagaraja with a fly-flap in his right hand, and his left hand resting on his hip. He wears a waistcloth, a bracelet, and an armlet. In his ears are large ear-ornaments, on his head is a tasselled turban, and round the head are five snake hoods. To the left a similar life-size figure stands like the first with a fly-flap in his right hand. His dress and ornaments are the same as those of the first. He differs from the first in having wings and as on his turban appears the head of Garuda this is apparently a figure of Garuda. The cobra king and the vulture were probably chosen to show that they have laid aside their natural hate to join in the worship of Buddha. On one side of each of the figures is a relic-shrine with a tee and an umbrella. The people call the relic-shrines *lings* as in shape they resemble Shaiv *lings*; and the figures they call *bhuts* or spirits and for that reason this group is called Bhutling or the *lings* guarded by spirits. The left face of the arch is neither dressed nor separated. The right face has been separated and to the right of the right face is a Bodhi tree, which, from the shape of its leaves, appears to be a *pipal* tree. Garlands hang from it and above the tree an umbrella is shown raised on a double plinth. A flying human figure on the left comes towards the tree but it is unfinished. On the topmost frieze below are holes for mortices but the mortices are not as usual carved from the rock but put in from without. Only two of the mortices remain. Above is the rail pattern and still higher seven arches and within each another small arch. On the sides are two similar arches one above the other. To the left of the cave, under the left end of the terrace, is an earth-filled cistern.

Cave XXXIX.

Cave XXXIX. to the right of cave XXXVIII. but on a higher level and about the same level as caves XXXVI. and XXXVII. is a cell with a broken veranda. It is 7' square and 7' high, and in the front and back walls are holes for the monk's pole. The doorway is 2' 2" broad and has holes for a wooden frame. The veranda is 7' 7". broad and its present greatest depth is 2', but much of it is ruined. To the right is a broken bench. The cave is not easily reached as the old steps are broken.

Cave XL.

Cave XL. to the right of cave XXXIX. is another cell 6' broad by 7' deep and 6' 4" high with a doorway 2' broad. The veranda and the steps to the cell are broken. Below Cave XL. is an earth-filled cistern.

Beyond Cave XL. the hill-side is not fit for excavation. After about 500 yards the north-west end of the hill is reached. Turning to the right is a narrow valley, to the right of which in a single block of rock five small excavations facing north-east have been made. Except cave XLIV. none of them seem to have been used. They have been numbered in continuation of the Bhutling group and apparently are part of the Bhutling group, as they have no separate chapel. These caves look out towards Junnar.

Cave XLI.

Cave XLI. far in the valley, is on a higher level than the other cells. It is an unfinished cell about 4' deep. About sixty-four yards to the right is an earth-filled cistern.

Cave XLII.

Cave XLII. about twenty feet below and twenty feet from cave XLI. is a veranda 7′ 10" broad and 5′ deep and an unfinished cell 2′ 7″ deep and 6′ 10" high with a finished doorway 3′ broad.

Cave XLIII.

About thirteen yards to the right and on the same level as cave XLII. is Cave XLIII. It is an unfinished cell 10' deep and 5' broad with, a doorway 5' 6" broad, and two holes for fixing a wooden frame.

Cave XLIV.

Below cave XLIII. is Cave XLIV. a dwelling consisting of a veranda and a cell. The veranda is 12' 5" broad 6' 10" deep and 6' high. To the right is a plain pilaster. The cell is 6' 11" broad, 6' 9" long and 6' high with a broken doorway 2' 2" broad. The floor of the inner cell is rough and unfinished.

Cave XLV.

About fifty yards to the right on a higher level is Cave XLV. an unfinished cell 6' 5" deep and 4' broad much filled with earth.

Shivner Caves.

Shivner hill has four groups of caves, two on the east or Junnar face, one on the south or fortified face, and one on the west or Nana valley face. Of the two groups on the Junnar face, one in the lower and the other in the upper scarp, the first or lower group begins below the south end of the fort. Going from right to left it has twelve caves.

Cave I.

Cave I. is a dwelling, including a cell and a veranda. The cell floor is about nine inches higher than the veranda floor. The cell is 7' 6" square and 6' 6" high with a doorway 2' 6" broad, and as high as the cell. The doorway has sockets for a wooden frame The veranda, which is rough with an open front and broken side walls, is 16' long 6' broad and 7' 6" high. It has catch-holes and seems to have been used by cattle-keepers. Beside the veranda to the left is a large empty cistern with a mouth grooved on all four sides probably for a wooden covering. Below are broken steps. A little to the left is a plain unfinished and almost inaccessible cave. To the right appear to be two earth-filled cisterns.

Cave II.

Cave II. is a chapel including a square hall with a relic-shrine or *chaitya* and a front veranda. The hall is 19' 6" square and 10' 10" high. Ten feet from the doorway is the relic-shrine a plain plinth without a dome, and with two lines of moulding at the base and a round hole. Perhaps the dome was stone built and covered relics placed on the plinth. In the floor and walls and in the top and base of the plinth are several rice-pounding and catch-holes. A drain is cut on the left to let off water. The hall door is 5' 7" broad and 7' 9" high with thick posts for a wooden door. The veranda, which is 16' 9" long by 4' broad and 9' 10" high, has a floor 1' 5" lower than the hall floor and a roof about 2" lower than the hall roof. In front of the veranda were two pillars and pilasters, of which the right pilaster and pillar remain and the left pair are broken. They are in the usual four-plated tee and waterpot style with a central octagonal shaft. In the right corner of the back wall of the hall is a recess probably to gather water during the rains.

Cave III

Cave III. is a small dwelling cave consisting of a cell and a front. The cell, which is 9' 8" long by 8' 6" broad and 7' 8" high, has a doorway 2' 5" broad with a threshold and lintel. The door is grooved for a wooden frame. The cave has catch-holes and rice-pounding holes and is still used by cattle.

Cave IV,

Cave IV. a dwelling cave with two cells and a front, is much broken. Except the front wall of the left cell, the partition wall and the front walls of the two cells are broken. The left cell is 7' 8' long by 7' 10" broad and 7' 8" high; and the right cell is smaller, 7' 4" by 7' and 7' 6" high. The veranda is almost gone; only its left side wall and roof remain. On the left side wall an inscription in two lines records the gift of a cistern, which is probably the earth-filled recess close to the cells. The inscription is in clear letters but a part in the beginning is lost. It reads:

Inscription 20.

(1).... the Bhutenakasa

(2).... podhi cha' deyadhama and may be translated '...... of Bhutenaka, and a cistern, meritorious gift.'

Cave V.

Cave V. is about twenty feet from cave IV. on a higher level. It is a small dwelling consisting of a front and a cell 8' 5" deep 8' broad and 9' high. A smaller cell, with a doorway 2' 3" long by 3' 3" broad and 2' 8" higher than the cell floor, appears to have been begun in the left corner of the back wall of the chief cell. The main door, which is 2' 4" broad and about 8' 7" high, has grooves for a wooden frame. The left wall of the veranda, which is 10' 8" long, is broken and in a corner has a much damaged modern figure of Ganesh. The right wall of the veranda is well preserved and 6' broad. As the cave faces east it appears to have been used by Musalmans as a prayer place. The praying niche may be traced in the middle of the back wall plastered up with cowdung and white clay. To the left, on the way to the cave, is an earth-filled cistern.

Cave VI. under cave V. an unfinished and earth-filled cave, appears to have been used by cattle-keepers.

Cave VII.

Cave VII. reached by broken steps in the rock, is a cell with a small front. The cell is 7' square and 6' 7" high. The doorway is 2' 4" broad and as high as the cell. The front is small 3' 4" broad and 3' 8" long. The cave has grain-pounding holes but no catch-holes.

Cave VIII.

Cave VIII. is a large hall with a front. It seems to be neither a dwelling cave nor a place of worship. The hall is 16' 9' deep by 16' broad and 8' high, The front wall is about 1' narrower than the back wall. The doorway is 5' 3" high or about 3" less in height than the cell. It appears to have had a door with large wooden frames. The front is 14' 4" long by 7' broad. The cave has both pounding and catch-holes. About twenty steps further are two cisterns both filled and the first covered by a sweet or *kadhinim* tree.

Cave IX.

To the right of the second cistern, rock-cut steps led to Cave IX. At present the rock with the steps has fallen and the cave is hard to reach. It is a small dwelling facing east consisting of a cell and a small veranda. Though unfinished it seems to have been used as a dwelling. The cell has a greatest depth of 6' 9" a breadth of 7' 6" and a height of 6' 9". The doorway is 2' 4" wide and 6' 9" high, and had a wooden door. The veranda has irregular walls and a bench in the left wall 3' 10" broad and 3' 10" high.

Cave X.

Cave X. is a dwelling of three cells and a front. The middle cell is broken. To the left of the first cell two steps lead to a cistern below now dry and like a cell as its front is open. The first cell is 6' 10' deep in the right wall and 8' 9"in the left wall, while the back wall is 6' 7" broad. The door is 2' 5" broad. The right or partition wall with the second cell is broken. The second cell is 7' 7" long by 7'5" broad with a doorway 2'5" broad. This cell is ruined at the foot of the back wall and a crack appears to let in water. The third cell is 7' deep by 7' 2" broad with a doorway 2' 5" wide The front is 16' 5" long by about 4' 9" broad and has a broken roof.

Cave XI.

Cave XI. is a cell with a small front. The cell is 7' square and 7' high with a broken doorway grooved on the left for a wooden frame. The front is broken. Six feet to the right of the cell is what looks like an earth-filled cell whose roof is on the same level with the floor of cave XI. It was probably a cistern. Further to the right, of five cisterns near one another the third and fourth hold good water. One of these two cisterns seems to have been taken care of, as it has signs of a modern door and in front has a small recess full of water for cattle or drinking water. Twelve steps lead to six other cisterns, the fifth of which holds good water, and has sockets for a wooden frame. In front of these six cisterns, a space about 10' broad, natural or artificial, has a good view of the town below, the Ganesh Lena hill to the right, Manmoda to the left, and distant hills bounding the horizon on the east.

Cave XII

Cave XII. is a cell with an open front. To the left is a bench as long as the wall, 1' 4" broad and 9" high. The cell is 9' long by 9' 9" broad and 6' high and seems to have been used as a view-seat.

The second group, in the upper scarp of the east face, has twenty-five caves going from south-south-east to north-north-west, and generally facing east-north-east. The caves have been numbered in continuation of the lower scarp caves, passing from left to right.

Cave XIII.

Cave XIII. where the scarp begins near the extreme left, is hard to reach. It is a single cell with benches in the back and right walls. It is about 7' deep 5' broad and 6' high with a doorway 2' broad and as high as the ceiling. To the left of this cell is an almost inaccessible excavation. It has an open front. It may be an unfinished cell or a cistern with a broken front. To the right of this cell a space about 70' long contained five or six cisterns of which nothing but the bottoms are left. They appear like five or six sitting places, and in later times, perhaps, were used to sit in as they have holes in front cut in the rock to support sheds. Twelve paces to the right is an open earth-filled bathing pond like what is called a *nanpodhi* in a Kanheri inscription. About twenty-five feet to the right of the pond is a cistern, and thirty-four paces further, on a higher level, is a small open-

mouthed cistern filled with earth. Eight paces further is another large earth-filled cistern and thirty-live paces further to the right is cave XIV.

Cave XIV.

Cave XIV. is about a hundred yards to the right of cave XIII. It is a two-storeyed dwelling, its ground floor in three parts, a plain veranda in front, a middle hall, and cells. The middle hall, which is 24' 5" broad 23' 5" deep and 9' high, has a large doorway 5' 9" broad and 9' high with large holes for a wooden frame. On either side is a window both 4' broad and 3' 10" high and with holes for wooden frames. Of ten cells four are in the back wall and three each in the right and left walls. Catch-holes in the walls seem to show that the cave was used for horses or cattle. The cells are on a higher level than the hall, and the ceilings of the four back wall cells are four feet higher than the hall ceiling. The three cells in the left wall are unfinished, the second more unfinished than the first, and the third still more unfinished. Of the four back cells the one in the extreme left is unfinished. The second cell is 6' 9" broad 6' deep and 6' 4" high, with a doorway 2' 5" broad and as high as the ceiling; the third is 5' 10" broad 7' deep and 6' 5" high and has a doorway 2' 6" wide and 6' 5" high with holes for a wooden frame; and the fourth 6' 2" deep 5' broad and 5' 10" high with a doorway 2' 5" wide and 5' 10" high. Of the three cells in the right wall the first two are unfinished. The third cell is T 10" deep by 7' 10" broad and 6' 10" high, and has a doorway 2' 5" broad and 6' 10" high with holes for a wooden frame. To the right of the third cell a passage, with a door 2' 6" broad and 9' high, leads to the upper storey. A flight of eight broken rock-cut steps leads to the upper storey, which is a plain hall 20' 8" broad 10' 7" deep and 7' high, with an open front veranda 23' 7" broad 5' 3" deep and 7' high. On its right is a quadrangular pilaster with the double crescent ornament. The original rock-cut railing seems to have been replaced by a wooden railing for which seven holes are cut in the rock. About 1' 6" of the floor near the back wall is rough and the rest is smooth, which suggests that a large wooden bench stood on the rough part. In the middle of the floor are two husking holes. To the left near the pilaster is an excavation probably the beginning of a stair leading below. In the left wall, just under the ceiling on a dressed surface and cut in large deep letters is Inscription 21 in one line. In the beginning is the usual Buddhist pentagonal symbol.

Inscription 21.

The inscription may be read:

Mudhakiyasa Malasa Golikiyasa [The second letter of this word is not distinct and looks like *mi*. But as the base of *ma* in this inscription is horizontal, and this is rounded, *li* seems preferable.] A'nadasa bena jana'na deyadhamam upatha'na and may be translated 'The meritorious gift of a reception hall by two men Mudhakiya Mala and Golikiya A'nada.'

This shows that such halls used to be called *upathana* or *upasthana* that is a sitting place, a visiting hall, or a reception hall. An excellent view stretching to the distant hills makes this well suited for a sitting or reception hall. Mudhakiya and Golikiya, given as the

names of the donors, seem to be surnames. To the right of the passage below is a broken cistern.

Cave XV

Cave XV. about thirty feet to the right of cave XIV. is an open cell without a veranda. The walls are not finished, and the cave appears to be merely a sitting cell. In front in the floor are three holes probably for a wooden shed. The cave is 9' deep 13' broad and 6' 5" high, and in a small recess in the left wall has a roughly carved relic-shrine with three umbrellas over the tee. Outside to the right is a cistern with good water, and near it, on a higher level, another cistern filled with earth.

Cave XVI and X VII.

Cave XVI. and X VII. About forty feet from cave XV. are Caves XVI. and XVII. two dwellings with finished verandas but cells only begun. The veranda of cave XVI. is 5' 6" broad 3' deep and 7' high, and the doorway 2' 6" broad and 5' 8" high. Cave XVII. has a veranda 4' deep 19" broad and 8' high, with an unfinished floor and a finished back wall and ceiling. The half-finished cell door is 2' 5" wide and 4' 10" high. About a hundred paces to the right is what looks like an earth-filled cistern. A little further to the right are broad steps cut in the rock,

Cave XVIII.

Climbing the broad steps a second flight of twenty-seven small steps to the right, lead b to a cell-like excavation, 11' deep 12' 5"; broad and 8' 10" high, with two holes in front for a wooden frame, Four steps to the right is a cistern with good water. Holes are cut in the rock either to help the ascent or for a sun screen. The excavation has no front wall but on the back are two dry cisterns infested by bats. The cisterns, which have well cut mouths about 2 high and 3' square, are about 13' deep and have holes over the mouths for a wooden frame. Between the two mouths is a small polished bench 8" broad 9" high and 3' 9" long. These cisterns are dry and probably were granaries.

Cave XIX.

About twenty feet further to the right is Cave XIX. a cell 8' 10" broad 7' 3" deep and 6' 3" high, with, along the right wall, a polished bench as long as the wall 1' 4" broad and 1' high. At the end of the bench, in the right and back walls, a small recess, 1' 6" square and 4' deep with a small bench, was probably used for keeping objects of worship. Between this cave and cave XVIII. steps led to the top of the fort and to the left a beginning of steps remains. These steps must be older than the Musalmans as they have recesses with images of the guardians Durga, Ganesh, and Batuka. [The images of Durga and Ganesh, which were cut in the rock, still appear; the image of Batuka is gone as it was probably not rock-cut.] The steps and images have been broken probably by the Musalmans, and a small fortification has been built on the top to close this way of approach. This confirms

the belief that before the Musalmans (1320), under the Devgiri Yadavs (1150-1310), the hill was probably used as a fort.

Cave XX.

Cave XX. about ten feet to the right of cave XIX. is an open cell about 7' broad 5' deep and 7' high, with an earth-filled cistern at the foot of the right wall.

Cave XXI.

Cave XXI. ten paces to the right of cave XX. is a large hall 19' 8" broad by 22' 6" deep and 8' 10" high, with a finely polished floor ceiling and walls. Along the back right and left walls are benches 1' 7" broad and 1' 8" high. In the middle of the back bench an altar 5' 6" broad stands 3' 5" in front of the bench and as long as the sides. The hall front is open with no doorway, but on either side is a pilaster and in front a small open veranda, 16' 8" broad and 2' 5" deep. The veranda ceiling is 1' lower than the hall ceiling. Like other similar halls this appears to be a dining hall or *sattra*. The only point of note is the advancing altar in the middle, which apparently was for the chief monk.

Cave XXII.

Inscription 22.

Cave XXII. is a large dwelling, consisting of a hall, with in the right wall two and in the back wall four cells. The hall was originally 24' 6" deep of which 7' in front are on a oneinch lower level to make it a veranda, the remaining 17' 6" being the hall with the cells. The veranda part has benches on either side, the left bench broken. The cells are about a foot higher than the hall and the ceilings are 3" to 5" lower than the hall ceiling. The cells vary from 6' G" to 7' square and are about 6' 6" high. The last cell in the back wall is unusually large, being 10" broad and 13' deep. Near the end on the right wall, this cell has a bench 3' 1" broad 6' 4" long and 2' 6" high, and near the bench in the front wall is a niche. This cell was probably for the chief monk. The other cells have peg-holes and no benches. In the veranda over the right bench was an inscription in two lines of well cut deep letters. It has been intentionally scraped away and only a part of the beginning and end of the first line appear. In the beginning is the Buddhist trident. The first letter yo is distinct and then appear traces of the letters *nakasa* which show that the cave was probably the gift of a Yavana. At the end of the second line the letters achariya are distinct, and then appears the top-stroke of *na* the piece of rock below having broken away.

Perhaps there was a wooden screen or wainscoting between the veranda and the hall as holes are cut in the ceiling just at the point which marks the boundary line. In the scarp which overhangs the cave about fifteen holes are cut probably to support a wooden roof. In later times a wall of well dressed stones has been built between the veranda and the hall in the place of the old wainscoting and an oranmental doorway has been built near the left end. Near the east end in a recess 2' 2" broad and 1' 9" long is a well carved

lattice. The shape and ornamentation of the doorway belong to about the ninth or tenth century. On the doorway in the middle of the lintel is a broken image of Ganesh which shows that the additions were Brahmanical. But no trace remains of any object of worship inside. To the left of the veranda is a large cistern, part of which runs under the veranda floor. But as the floor and part of the overhanging rock have fallen away, it is open to the sky. To the left of the cistern is a dwelling whose right and front walls are broken. It is 15' 2" broad 11' 6" deep and 8' 3" high, with, along the entire left wall and half the back wall, a rock-cut bench 1'9" broad and 1'1" high, and along half the right wall a seat about 2" high. In front of the broken front wall is a broken cistern. A break in its right wall has joined it with the large cistern of the cave. To the right of Cave XXII. are two broken-fronted cells one above the other which were probably connected with Cave XXII. The upper cell is 15' square and 6' 8" high. The front part of its right wall is broken. Near the other end of the right wall a part of the floor has been broken. Of the lower cell, which is smaller than the upper cell, both the sides and part of the ceiling which forms the floor of the upper cell are broken. Its walls are well; polished. To the right a polished doorway now broken led to cave XXIII. which is on the same level as the lower cell.

Cave XXIII

Cave XXIII. is an open veranda and an inner hall. The veranda roof has fallen out and lies in the veranda. The inner hall is 20' 8" broad 13' 9" deep and 8' 4" high. It has a plain polished doorway 2' 7" broad and 5' high and benches of varying size along all the walls. The bench along the entire length of the back wall is 1'5" broad and 1'2" high and connected with it is a bench 1'7" broad 4'10" long and 2'8" high in the corner between the left and the back wall. The bench along the right wall is 7' 4" long and equal in height and breadth to the bench along the back wall. Connected with this bench, in the corner between the right and front walls, is a large bench 3' 7" broad 6' 5" long and 2' 2" high. The open veranda, which is much broken, is 18' 8" long and about 10' broad. In the left wall a broken doorway communicates with the lower cell next to cave XXII. To the right of the doorway is a small niche and to the rip-lit of the niche is a galloping horse with a saddle and reins but without stirrups. [The horse appears to have been carved as a fancy work by some artist while polishing the wall.] It is hard to understand to what use this cave was put. It has no separate cells for monks, nor is it a dwelling for a single monk. As it has benches of varying size it was probably used by various monks of different ranks, perhaps as a place of learning, the high bench on the right being for the preceptor the Acharya or Sthavira, one in the left corner a little lower being for the sub-preceptor or *Upadhyaya*, and the rest for scholars. To the right of the cave is an unfinished recess.

About a hundred yards to the right, a group of fourteen caves near one another are popularly called the Bara Gadad or Twelve Caves from the twelve cells in cave XXX. which is in the middle of the group.

Cave XXIV.

Cave XXIV. the first, of this group is on a higher level than the rest, and is reached by about forty broken rock-cut steps. It is a large dwelling left unfinished apparently not on account of any flaw in the rock. The veranda, which is 7'9" deep by 33' broad and *T 7*" high is finished, though much of its floor is broken. In the veranda to the left is a cell 5' 5" broad 4' 4" deep and 6' 3" high with a door 2' 8" broad and a small bench 2' 10" long 2' 2' high and 1' broad. The hall, which is only partly cut, is 6' 4" deep 18' 3" broad and 7' 5" high. To the left is a window. Though unfinished the cave seems to have been used, as the doorway seems to have had a wooden door for which holes are cut in the rock. To the left, near the first cell, is another unfinished cell in the back wall of the veranda, 6' 10" broad 7' 7" deep and 7' 1" high with a door 3' 2" broad and 7' 1" high. Perhaps the cell was the beginning of a cutting to join it with the hall, its door, as in other caves, serving as a side-door.

Cave XXV.

About thirty feet to the right of cave XXIV. and on a rather lower level is Cave XXV. a large cell 1(3' 6" broad by 13" deep and 9' 7" high. It has an open front and a large broken cistern to the left.

Cave XXVI

Close to its right is Cave XXVI. a small cell with a broken front. To the left is a broken bench 2' 5" broad and 2' 5" high. The cell, which is 9' 4' broad 7' 7" deep and 6' 9" high, was painted apparently in circles. Close to its right is a small recess with a bench, apparently a small view-seat.

Cave XXVII.

Cave XXVII. is a dwelling in two parts an inner cell and a veranda. The cell is 7' 6" broad 7' 2" deep and 6' 8" high and, to the left in a recess, has a bench 2' 7" high by 2' 3" broad and 6' 4" long. The door, which is about 2' 6" broad and 6' 8" high, has holes for a wooden frame, and the veranda is 13' 6" broad and about 5' 11" deep. In a recess in the left wall, which is 4' 11" deep, is a relic-shrine in half relief consisting of a round dome with a tee and umbrella. The plinth with the rail pattern is broken. Beyond the left wall is a cistern with a broken top. The veranda ceiling is 9" higher than the hall ceiling. In the veranda to the left of the doorway is Inscription 23 in five large lines in letters like those of the Vashish-thiputra inscription in Nasik cave III. [Compare Bombay Gazetteer, XVI. 549-554.] except that the *ikaras* of this inscription are rounded and winding. The first two lines are entire. Nearly the first half of the third line appears to have been intentionally rubbed away about the time of the inscription, and the surface where the letters are rubbed away is slightly lower. Traces of some of the letters appear but the letters cannot be clearly made out. The inscription may be read:

Inscription 23.

Apaguriya'na savagiriya'sa (sa) putasa patibandhakasa giribhutisa sakhuyarusalena podhi cha

| (2). (de)yadhamam [The <i>de</i> of <i>deyadhamam</i> has been omitted by the engraver by mistake.] etasa oha lenasa podhiya cha nakare cha bhikhuni upasayasadham mutari ya'na akhayanivika |
|--|
| (3)eto lenasa chivarika kaha'pana [The <i>na</i> of <i>Kahapana</i> looks like <i>ko</i> through a mistaken stroke of the engraver below.] sodasa podhiya chiva |

- (4).esa [*Esa* looks like *epa*. The curved stroke at the side has been omitted or perhaps rubbed away when smoothing.] manam cha bisa hasato payoga'to riva dhisahasam vadham [The three letters after *vadham* are not well engraved.] upayyasa
- (5).ya upasayo nagare giribhutisa bitiyika'yi Sivapalanika'ya and may be translated 'The meritorious gift of a dwelling cave and cistern by Patibha dhaka Giribhuti son of a Savagiriya of the Apaguriyas, with his wife S'ivapa'lanika'; for this a permanent capital In front of the veranda of this cave holes are cut in the rock probably for a wooden shed.

Cave XXVIII.

Close to the right of cave XXVII. are Caves XXVIII. and XXIX. At first sight these two appear to be one dwelling but examination shows them to be two. The veranda ceilings of the two are separate, and Cave XXVIII. juts out a little more than cave XXIX. Between the two was originally a wall, and, when the wall was broken, a wooden partition appears to have been made for which these holes are made in the ceiling. Both are dwelling caves and consist of a veranda in front and two cells each in the back wall. The first cell, which is 10' broad 9' 5" deep and 7' 5" high, has a window 2' 1" broad and 2' 4" high in the front wall, to the left of the door which is 2' 3" wide and 6' 5" high. The window and the door have holes for a wooden frame. The second cell is 9' 1" broad 8' 3" deep and 8' high and has a door 3' 2" broad and 8' 8" high, with holes for a large wooden frame. To the left, in the front and back walls, are holes probably for the monk's pole. The floors of both the cells are 4" lower than the veranda floor and the ceiling is as high as the veranda ceiling. Remains in the ceiling, especially in the second cell, show that both the cells were painted. The painting was of a poor order consisting of three concentric circles in square panels. The colours used were white, yellow, and black. The veranda is 22' 3" broad 5' 3" deep and 7' 8" high. Nearly half of the floor in front is broken. The roof is entire and about an inch higher than the veranda roof of cave XXIX.

Cave XXIX.

Cave XXIX. close to the right of cave XXVIII. consists like cave XXVIII. of two cells, with a front veranda whose forepart as in cave XXVIII. is broken. The first cell is 10' 2" broad 8' 9" deep and 7' 1" high, with a doorway 3' broad and 7' 1" high. The ceiling is 2" lower than the veranda ceiling. The second cell is 8' 11" broad 9' deep and 8' 1" high and

has a door 2' 8" broad with holes for a wooden front. To the left, in a recess 2' 10" deep 7' 1" broad and 2' 9" high is a bench, and to the left in the front and back walls are holes for the monk's pole. Both cells have husking holes. Both were originally coated with plaster and painted and traces of the plaster remain. The veranda is 23' 10" broad and 5' 3" deep, and has a broken right wall. Further to the right are three cisterns, the middle cistern holding good water.

Cave XXX.

Cave XXX. is a large dwelling with twelve cells or *barasagabbham*, four cells in each wall. The cave, which gives the group its local name of Bara Gadad, consists of a veranda, a middle hall, and four cells each in the right back and left walls. Near the cell doors, all along the walls, runs a bench about 2' broad and 1' 1" high. The hall is entered by a large middle doorway 6' broad and 8' 9" high, and a left doorway 3' broad and 6' 10" high. On either side of the large doorway is a large window, the left window 6' 10" broad and 3' 10" high and the right window 6' 8" broad and 4' high. Both the doors and windows have holes for wooden frames. The hall is 33' 5" deep 38' broad and 10' high. The ceiling has remains of plaster with traces of colour. Except the third cell on the left the cells are finished and stand from 6" to 1' higher than the bench all round in front of them. The side walls of some are not finished and are unequal in size. The cells vary in depth from 5' 7" to 7' 7" and in breadth from 5' 2" to 8'. The doorways are about 2' 5" broad and almost as high as the cell ceiling. The veranda, which is partly ruined, is 34' 3" broad 5' 6" deep and 8' 9" high.

Cave XXXI.

A flight of thirteen broken rock-cut steps from the left of the veranda of cave XXX. leads up to the veranda of Cave XXXI. This cave is almost a part of cave XXX. as it is connected with its veranda. It is a dwelling consisting of a veranda and an inner hall. The hall is 15' 9" broad 14' 8" deep and 7' 6" high, and has a door 3' 5" wide by 6' 10" high with holes for a wooden frame. The veranda is 18' 7" broad 4'4" deep and 8' 2" high, its floor about 2' lower than the hall floor. In front of the veranda were two pillars and two pilasters. The pillars are broken and only their six plated capitals remain attached to the ceiling. The pillars appear to be undressed and their shafts and bases were never begun. The pilasters, which are nearly quadrangular, are undressed and unfinished.

Cave XXXII.

Cave XXXII. close to the right of cave XXX. and on a higher level, is a small dwelling consisting of a veranda and an inner cell. The cell is 7' 8" broad 7' 6" deep and 7' 6" high and has a doorway 2' 10" broad and 7' 6" high with grooves for a wooden frame. The veranda, whose floor is partly broken, is 16'broad 4'3" deep and 7' 6" high. In a recess to the right is a small seat 2' 6" high 3' 9' broad and 2' 4" deep. The cave was painted and the ceilings of both the cell and the veranda have remains of plaster and colour.

Cave XXXIII.

Cave XXXIII. is close to the right of cave XXXII. with two cisterns between them. It consists of a veranda, a cell, and a half cell. The veranda is 8' 2" broad 6' 9" deep and 9' 4" high. In the back wall of the veranda is the half cell 3' broad 5' 8" deep and 6' 10" high with the ceiling 6" lower than the veranda ceiling, and a wooden door whose grooves remain. To the left of the half cell is a seat recess 4' broad 2' 3" deep and 4' high. To the left of the veranda is the cell, with a greatest depth of 7' 6" a greatest breadth of 9' 2" and a height of 6' 5", and a broken door 2' 9" broad. Its back and front sides form an angle and the back and left sides form an arc of a circle, a peculiarity of shape due to two cisterns below, whose tops are now broken.

Cave XXXIV.

Cave XXXIV. close to the right of cave XXXIII. is unfinished.

Cave XXXV.

Cave XXXV. close to the right of cave XXXIV. is a *panchgarbha layana* or five-celled dwelling. It consists of a hall and five cells, three in the left wall and two in the back wall. The hall is 18' 7" broad 18' deep and 7' 3" high with a doorway 5' 10" wide, and 7' 2" high. To the right of the doorway is a broken window 4' 10" broad and 2' 2" high. Both the door and window have grooves for a wooden frame. In the back wall, in a recess between the cells, is a relic-shrine or *daghoba* in half relief. The plinth of the relic-shrine is 1' 3" high and 3' 5" in diameter, and the dome is 3' high with a diameter of 3' above the middle and 2' 6" at the base. Over the dome is the rail pattern 5" high and 10" broad and the tee 8" high in four plates, and on the top of the fourth plate, which is 1' 7" broad, is a beaded carving. Over the plates is the shaft and over the shaft an umbrella 3" high. The cells, two in the back wall and three in the left, vary from 3' 8" to 7' in breadth and 4' 8" to 6' 7" in depth and are all about 7' high. The cell doors are 2' 4" wide and 7' high. All the cell doors, as well as the large door and window of the cave, have grooves for wooden frames.

Cave XXXVI.

Close to cave XXXV. is Cave XXXVI. the great chapel cave of the group. Though both are in the same veranda, cave XXXV. is a little older than its neighbour. When the chapel was cut, its veranda seems to have been joined with the veranda of cave XXXV. The veranda ceiling of cave XXXV. was originally lower than now, being joined with the veranda ceiling of the chapel. The marks of its original height and breadth can still be seen in the wall.

Cave XXXVI. is the chapel or place of worship of this group. It is in two parts, a hall with the relic-shrine and a large veranda in front of both this and cave XXXV. The entrance to the hall is by two doors a main door in the middle 6' 3" broad and 11' 3" high and a side door to the left 4' 8" broad by 7' high originally a window but afterwards a doorway. To the right of the middle door is a: window 3' 5" broad and 5 11" high. The doorway leads into a space 4' 8" broad beyond which is a raised plinth five inches high

and three feet broad on which are pillars and pilasters. Over the, pillar capitals is a quadrangular shaft on which the roof rests. The shrine, containing the relic-shrine or chaitya, is 31' deep by 21' broad' and is two inches higher than the outer space. In shape the daghoba or relic-shrine is of the Gotamiputra period (A.D. 35-1507), its plinths 32' 3" in circumference and 4' 9" high. Over the plinth is a 1' broad belt of rail pattern. Over the belt of rail is a flat dome 5' 3" high and over the dome the capital with rail pattern. Over the capital is a four-plated tee in all 3' 4" high. Over the tee is a shaft and an umbrella cut out of the ceiling. The ceiling has remains of painting consisting of concentric circles in square panels and flowers and leaves in the vacant corners. The panels are in five plates, a black plate in the middle and two white and red plates on either side. Some panels have seven plates a black plate in the middle with three plates white, red, and yellow on each side. The circles are mostly the same in colour, the innermost yellow, the next red, the next a large white circle, the next a a maller red circle and the last a large white circle. Some have an outermost red circle with scroll patterns. Four steps lead to the veranda which is 47' broad and 11' 10" deep. On the back of the veranda by the side of the doorway and along the right wall are benches 2' broad and 1' 3" high. The veranda ceiling is lower than the hall ceiling. In the back wall, of the veranda to the right of the right window is a beautiful inscription well cut and well preserved with a fine altar-like symbol in the beginning. The inscription may be read:

Inscription 24.

- (1) Virasenakasa gahapatipamughasa
- (2) dhammanigamasa deyadhammam chetiyagharo
- (3) niyuto savalokahitasukha'ya

and may be translated

'The meritorious gift of a chapel cave of Virasenaka a chief householder, an upright merchant, assigned for the welfare and happiness of all.' In the veranda to the right is a cistern. Then follow three other cisterns two of them earth-filled. Then comes the beginning of an excavation and after this a cistern with broken front and looking like a cell. Next comes another excavation a cistern with a broken front. Its mouth appears and in the recess was an inscription in large letters of which traces remain. In one line the letters *sa gatana* can be read. After the cistern on the same level is another cistern with a broken front. A part of its mouth and recess appear above and in the recess is Inscription 25 which reads:

Inscription 25.

Yavanasa Irilasa gata'na deyadhama podhiyo

and may be translated 'The meritorious gift of two cisterns by the Yavana Irila a Gata'na P' The two cisterns mentioned in the inscription are this and one to the left.

Cave XXXVII.

Close to the last cistern is Cave XXXVII. a cell with a broken veranda floor. The cell is 7' 8" broad 7' 8" deep and 6' 3" high, and has a door 2' 6" broad and 6' 3" high with grooves for a wooden frame. The veranda is 6' 4" broad and 4' 2" deep To its right is a broken cistern in whose recess is Inscription 26. in two lines. The middle of the inscription is water-worn. It may be read:

Inscription 26.

- (1) Apaguriya'na Savagiriya'sa putasa patibadhakasa (Gi)ribhutisa sa (ha)bhaya'ya Sivapa'linaka'ya
- (2)(de)yadhama podhi lena cha etasa akhayanivi pa'si.....chara'......
- (3) ha'pana' evo

and may be translated

The third or west face group of six caves is in a curve in the upper scarp. The caves generally face west and are numbered from right to left in continuation of the upper scarp of the east face.

Cave XXX VIII

Cave XXXVIII. is the first in the curve beginning from the right. Further to the right are what appear to be cisterns now out of reach. Cave XXXVIII is a large cell, 17' 4" deep 15' 4" broad and 7' 6" high. Its front wall is broken and holes have been cut for a wooden screen dividing the cave into a veranda and a cell. The holes of the screen still appear in the ceiling. To the right of this cell is a cistern. The ceiling has old plaster and appears to have been painted. The coating and plaster on the walls are modern. The cave has some modern stone and clay work and husking holes.

Cave XXXIX.

Cave XXXIX. twenty feet to the left of cave XXXVIII. is a cell 9' 7" broad 8' deep and 6' high with a broken front.

Cave XL.

Twenty feet further to the left is Cave XL. a cell 8' deep 10' 2" broad and 6' 6" high with the left and front walls broken. Along the left wall is a broken bench. To the right is an excavation which was abandoned on account of a crack in the back wall.

Cave XLI.

About twenty-five feet to the loft, on a slightly higher level, is Cave XLI. a dwelling with four cells or chaugabbha. The cave is in throe parts a veranda, a middle hall, and four cells, two in the back wall and one in each side wall. The hall, which is 15' 6" broad 14' 4" deep and 8' high, is entered by a middle door 4' 2" broad and 7' 2" high with a window on either side, the left window 4' 4" high and 2' 6" broad and the right window 4' 6" high and 2' 8" broad. All three, the door and the windows, have grooves for wooden frames. The cell floor is about 1' higher than the hall floor and the ceiling is 3" to 8" lower than the hall ceiling. The left cell is 6' deep 6 broad and 6' 2" high with a doorway 6' wide and 6' 2" high. The cell has no bench. The left cell in the back wall is 7' 2" deep 6' 3" broad and 6' 6" high with a door 2' 5" wide. Along the left side is a bench 2' 3" broad and 2' 5" high. The right cell in the back wall is 7' 2" deep 6' 2" wide and 6' 2" high with a door 2' 2"; broad and 6' 2" high. Along the right side is a bench 2' 5" broad and 2' 2" high. The right cell is 7' 3" deep 6' 4" broad and 6' 3" high with a door 2' 5" wide and 6' 3" high. Along the left wall is a bench 2' 2" broad and 2' 2" high. All the cell doors have grooves for wooden frames. Except the left wall cell all have hole in the side walls for the monk's pole. The veranda is 6' deep and 19' 4" wide. Its floor is broken, but the ceiling is in good order and on a level with the hall ceiling. To the left are five cisterns.

Cave XLII.

About seventy yards to the left of the five cisterns comes Cave XLII. In the middle are several cisterns mostly filled up and hidden from view. Cave XLII. is a small cell 7' 2" deep 7' broad and 7' high with an open front or veranda. The front 11 of the cell is broken. It had a doorway with grooves of which marks remain in the floor and ceiling. The veranda side walls and floor are broken, and the ceiling has remains of plaster and painting.

Cave XLIII

About thirty feet to the left of cave XLII. is Cave XLIII. a large hall with a veranda. The veranda is 32' broad and 3' 6" deep with on either side a quadrangular pilaster. Between the pilasters were four pillars on which the ceiling beam rested. The plated capitals of the pillars hang from the beam. The pillars do not seem to have been broken from below the capitals, as the surface of the last plate of each capital is dressed and smoothed and has a central hole about 1½' square. The hole would seem to show that some mistake was made in cutting out the pillars and that wooden pillars were fitted into the holes. The roof projects four or five feet beyond the veranda beam. A door in the back wall of the veranda, with a window on each side, leads into the hall. The door is 5' broad and 7' 11" high, the left window 3' 9" broad and 2' 11" high, and the right window 4' broad and 2' 11" high. The hall is 27' 5" deep 30' 7" broad and 8' 6" high. All along the walls runs a

bench 1' high and 1' 6" broad. The veranda and hall ceilings, especially the hall ceiling, have remains of painting. In the hall the' painting is very clear and consists of concentric circles in square panels, a style common in these caves, but here with the unusual addition of patterns in the circles. Of the colours green is the best preserved. Outside the veranda on either side are a series of rock-cut holes to fit wooden pillars. As the cave faces west, temporary *mandaps* or awnings were probably built on either side for the. monks to rest of an evening. To the right of the cave is a cistern holding good water and to the left also must have been cisterns though they are entirely ruined.

South Group.

The fourth or south face group of seven caves is in the lower part of the upper scarp. The way to the caves turns to the right after passing the fifth gate or Shivabai Darvaja and leaving the main road to the fort. The way passes by some large modern rock-cut cisterns, and leads to the temple of Shivabai where the caves begin. The row of caves runs from west to east and generally faces south. The caves are numbered from left to right in continuation of the third or west face group.

Cave XLIV.

Cave XLIV. is a large hall 20'3" deep 21' broad and 9' 1" high, with a broken front. The Marathas have turned the cave into a temple 32' long and 25' 8" broad in outside measurement. In front of the temple is a raised veranda 60' long 37' broad and 20' high with two side buttresses jutting out. It is built of fine dressed stones and over it the temple hall or sabhamandap is built turning the cave into a shrine. The mandap, 26' 6" long 21' broad and 11' high, is built in the dwelling style. The roof rests on two rows of wooden pillars carved in the Moghal cypress-tree style, and in the floor between the two rows of pillars is a hole for a fountain. Between each pair of pillars is a well carved wooden arch in the Moghal style and over the arches between two beams is a strip of wood with well carved patterns. The side walls of the hall are built of dressed stones and the front wall of brick and the roof is flat and tiled. A broken part of the shrine front has been repaired with fine dressed stones and over it is a wooden latticed screen of good workmanship with two small pillars of the same style as the hall pillars. In the back wall of the shrine, on a stone altar in a wooden porch, is the goddess Shivabai a shapeless piece of rock covered with redlead. The goddess is said to be the family deity of Shivaji, who was born in this fort. In the beam over the doorway are somewhat damaged paintings. The paintings are good specimens of Maratha art with figures of Brahma and his daughter Sarasvati, Shiv, Vishnu, the moon, the planet Rahu, and other gods. The middle painting, which is spoilt, appears to have had figures of Shiv and Parvati. Inside the shrine, on the side and back walls, are well executed and well preserved paintings. As specimens of Maratha painting of the 17th century they are worthy of note. The side walls have three panels, each about 7' long and 4' broad. The left wall gives scenes from the Ramayan. The first panel paints the fight between Ram and Ravan. With Ram is a large force of monkeys; with Ravan an army of fearful demons. Each leader sits in a large chariot. Among weapons of war are spears, arrows, and large stones. In the second panel is the fort of Janakpur and outside the fort a king going in procession or *svari*. Above is

Janakpur where Ravan Ram and other kings have come to be present at Sita's consort-choosing or *svayamvar*, and where, from a balcony, Sita invests Ram with the wedding garland. Above, two processions approach from opposite sides. In the third panel Ram is sitting with Sita. Facing. Ram are Vashishth and other seers, and behind Ram stand Lakshman, Bharat, and Shatrughna, and Hanuman comes with monkeys and bears and falls at the feet of Ram, while one monkey presents Ram with mangoes. Above in the same panel sits Vashishth approached by Ram and his three brothers with Sita and Hanuman in front. Behind Vashisth are several sitting women.

On the right wall are scenes from the life of Krishna in four panels, the first panel small, the other panels as large as the left wall panels. Beginning from the left, in the first panel is Indra falling at the feet of Krishna, giving him a cow, and asking; pardon for his fault in harassing Krishna with too much rain. Above, the gods play music and drums and heavenly damsels or *apsaras* strew flowers over Krishna. In the next two panels are the. child-like pranks or bala lila of Krishna who steals butter from cowherdesses, goes with his friends and breaks their curd pots, sits with his favourite Radha and other women in swings, and takes, presents from women. Some of the paintings are of every-day life, cowherds husking grain, cooking, grinding corn, and minding the dairy. Above, Krishna upholds the mountain Govardhan and saves cowherds and cows. From the heavens clouds in the form of elephants, from their trunks deluge the mountain with water. In the third panel Krishna carries off Rukmini in his chariot from a, temple. Then follows a fight between Krishna and Shishupal the brother of Rukmini. Above in the same panel is Krishna with Rukmini, and higher still are gods. In the fourth panel is the scene of Draupadi's consort-choosing, and Arjun shooting a fish with as arrow aiming from a reflection of the fish in a waterpot below. Then follows Draupadi investing Arjun with a wedding garland Above, a scene represents the churning of the ocean with the gods at one end of the serpent-rope and the demons at the other end.

In the back wall are six panels. In the first panel, beginning from the left, is the figure of a goddess with ten heads ten hands and ten legs. In the second panel is the Mahishasurmardini or buffalo-demon-slaying goddess. In the third panel is the same goddess again with one head and twenty hands. Above, in a long panel, are the first five incarnations of Vishnu as the fish, the tortoise, the boar, the man-lion, and the dwarf. In the first panel to the right of the image of Shivabai is Narayan lying on his serpent couch; in the second panel Shiv and Parvati; and in the third panel Shiv in the Trimurti or trinity with Brahma and Vishnu. Above, in a long panel, are the six incarnations of Vishnu, Parshuram, Ram, Krishna, Buddha, Kalki, and Vatashayin. The image of Buddha is like the image of Vithoba at Pandharpur.

In the back wall of the shrine is a stone umbrella on an altar of well dressed stones. Under the umbrella on a small stand of well-dressed stones is a rude stone covered with redlead the image of Shivabai. A little to the right of the temple and on the same level is a dry cistern.

Cave XLV.

Cave XLV. to the right of Shivabais temple and on a lower level, is a small dwelling consisting of a cell and a veranda. The front pilasters of the veranda are broken. The cell is 7' long 7' broad and 7' high with a doorway 2' broad, half built up from below probably by the Marathas or Musalmans, who seem to have used the cell as a store-room. The veranda is 10' 4" broad by 5' 4" deep and 7' 6" high. Close to the right of the cave is an unfinished excavation, the beginning of a cell.

Cave XLVI,

Further to the right is Cave XLVI. a dwelling consisting of a cell and an open veranda. Within the cell is a half cell in the back wall with a benched recess to the left. The cell is 7' 8" deep 10' broad and 7' high. The half cell is 3' 5" broad and 6' deep, and the bench 2' 3" broad and 5' 11" long. The right of the front wall is broken, but the width of the cell door 2' 3" can be traced from marks in the ceiling. The door has grooves for a wooden frame. The veranda, whose floor is broken, is 24' broad 4' 10" deep and 7' 5" high. In the back wall of the veranda, to the left of the door, on a smoothed surface, is Inscription 27 in two lines well cut and well preserved. It may be read:

Inscription 27.

- (1) Ugaha [On ga of Ugaha appears something like a stroke. The word may be Ugaha.] upa'sakasa putasa
- (2) Isipa'litasa [The *ikara* of si in *Isi* is very dim.] saputakasa [The base of *pu*, the vertical stroke for the *ukara*, is faint.] danam

and may be translated

The gift of Isipa'lita son of Ugaha an Upa'saka with (his) sons.

Cave XLVII.

Cave XLVII thirty feet to the right of cave XLVI. and on a rather higher level, is a dwelling consisting of a veranda, a cell in the right wall of the veranda, a cell and a half cell in the back wall, and a seat recess in the left wall of the veranda. The back cell if 7' deep 8' broad and 7' high with along its back wall, in a recess, a bench 2' broad and 2' 4" high. The cell door is 2' 7" wide and has a-small window to its right. The half cell to its left is 5' deep 3' broad and 7' high. The cell to the right of the veranda has lost its front and right walls. Along its left runs a bench. The recess in the left wall is 2' 1" broad and 2' 5" high. Its left part is broken. The veranda, which is 14' 5" broad 8' 4" deep and 7' 5" high, has' part of its floor and ceiling fronts broken.

Cave XL VIII.

Cave XLVIII. about twenty-five feet to the right of cave XLVII. is a hall 15' broad 18' deep and 8' high. On the back right and left walls is a bench about 1' high and 1' broad.

The bench is not well finished and part of it is broken. It has an open front with two pillars somewhat like pilasters. On the face of the left wall is a well cut inscription in four lines. In the beginning of the first line is the Buddhist trident and at the end of it is the *svastika* mark. The inscription was hidden by a modern wall. It may be read;

Inscription 28.

- (1) Yavanasa
- (2) Chitasa gatanam
- (3) bhojanamatapo
- (4) deyadhama saghe

and may be translated '

The meritorious gift of a refectory by the Yavana Chita Gatanam for the Congregation. To the left of this half is a cistern and beyond the cistern a bench in a small recess. To the right of the hall is another cistern.

Cave XLIX.

Close to the right of the right cistern is Cave XLIX. a small dwelling consisting of an open veranda and an inner cell. The cell is of very little depth and the left side is not fully cut because of a layer of soft clay in the rock. The cell is 4' 5" deep 10' broad, and 7' high. The doorway is 3' 3" wide and 7' high. The veranda, whose floor and ceiling are partly broken, is 8' 7" broad and 10' high. To the right of Cave XLIX. are three cisterns.

Cave L.

Cave L. close to the right, is a large quadrangular chapel or *chaitya* with a flat roof. It is in three parts, a shrine, a veranda, and a large hall to the right. The shrine is 11' broad and 20' 8" deep and the relic-shrine or *chaitya* is 12' from the doorway. It consists of a round plinth over three circular bands with, over the plinth, place of the usual rail pattern, another round band about four inches narrower in diameter than the plinth. Over the band is flattish round dome without a tee. To the right of the chapel a doorway leads into a large hall which has a main doorway in the veranda. The hall is 22' 4" deep 24' broad and 8' 4" hight. Along its back wall is a recess about 8' high, and in the recess, along the entire back wall, is a bench 3' broad and 3' high. In the middle of the bench are two holes on a square dressed surface probably intended for setting an image. The work may be old or modern. The bench is higher than the benches in caves and looks modern. In front of the chapel is the veranda 23' broad 4' deep and 10' high. It had two front pillars and two pilasters and traces of the right pillar and right pilaster remain. The chapel doorway is 5' 3" broad and 10' high. It has grooves for a large wooden frame. This doorway and half of the right side door, leading from the chapel into the hall, have been closed by a modern

work of stone and cement. It appears that either under the Musalmans or the Marathas the chapel was used as a granary or storehouse or as an ammunition room. It is now dark and full of bats. To the left of the doorway just under the ceiling is Inscription 29 in one line of well cut letters. The inscription may be read: and may be translated

Inscription 29.

Uga'haputasa Isipa'litasa sapariva'rasa chetiyagharo da'nam. and may be translated

'The gift of a chapel cave by Isipa'lita (sk. Risipalita) son of Uga'ha with (his) family.'

Further to the right a modern fortification prevents further passage-Beyond the fortification are three excavations, too hard to get at but seen from below in climbing the fort.

Tulja Caves.

The Tulia group of eleven caves is in a hollow in the east face of the Tuliabai hill [The hill taker its name from a modern figure of the goddess Tulja cut in Cave III.] about two and a half miles west of Junnar and a mile and a half west of Shivner. The hill, which is about 400 feet high, has, about 100 feet above the plain, a scarp half hidden by earth and stone washed from the upper slopes. A gap or curve divides the hill into two blocks or spurs, and the row of caves are cut in a short scarp of rock, on the east face of the south or right block, at the head of a valley about 100 feet above the plain. From Junnar the way to the Tulja caves passes under the great pointed northern scarp of Shivner, which from below looks like the black hull and rounded stern of some huge ship. To the left is the west face of Shivner with a sprinkling of brushwood in the lower slopes, and, above, a great unbroken wall of trap curving south-east, and then with a sharp bend turning south-west. In the curve is the third Shivner group of six caves. At the south-west end the cliff is lower and an outwork on the face of the hill-side marks the only approach to the hill top. Except a rough rocky stream to the east of Shivner, the road is level and easy for a cart. On the right bank of the Kala or Jauna stream, half a mile beyond Shivner, is a small square temple of the Jam goddess Padmavati the guardian of Parasnath the twentythird Tirthankar, with square stone walls and a brick dome. One or two old stones lie close to the north of the temple.

The way to the caves climbs the Tulja hill by an easy path up the left or south side of the valley. The front of the first four caves is dressed with a modern masonry wall, and about the centre of the line of caves, about twenty feet below, is a modern water cistern with a masonry wall on the east and south. The verandas and fronts of most of the caves have fallen leaving, towards the right, one or two patches carved in horse-shoe arches and belts cut in the Buddhist rail pattern. The caves have a pleasant outlook to the east. The great scarp of Shivner lies on the right, and about four miles further the bare slopes and wall-like cliffs of the Hatkeshvar or Suleman hills. Between the two lie the broad plain and the trees and garden lands of Junnar.

The caves are near one another in one row from left to right, facing on an average east-north-east.

Cave I.

Cave I. is a *panchgarbha layana* or five-celled dwelling. It is in two parts, a middle hall and five cells. The middle hall is 17' 10" square and 7' 3" high. Its front wall is broken but traces of the doorway, 4' 6" broad and 7' 3" high, remain. The floor and walls are well paved and smoothed. Of the five cells two are in the left wall, one in the right wall, and two in the back wall. Of the two left wall cells, the left cell is 7' x 7' x 7' and he right cell is 7' 8 X 7 5" x 7' 6". The front wall of the right cell and the partition wall of the two cells are broken. Of the back cells, whose floor is about 3" and ceiling about 5" higher than the hall floor and ceiling, the left cell is 7' 9" x 7' 6" x 7' 10" and the right cell 7' 7" square and 7' 8" high. The right wall cell, on the same level as the back cell is 5' 9" x 7' 6" x 7' 8". The doorways of all the cells are about 2' wide and 7' 6" high, and all have grooves for wooden frames. Except the right wall cell all have holes in the side walls. The hall ceiling projects a little, and under the same ceiling, to the left of cave I. is an excavation (6' x 5' 9" x 7' 8") with the front and part of the left wall broken. It may be a separate cell.

Cave II.

Cave II. close to the right of cave I. is a chapel cave and differs in its round plan from all other known chapels in Western India. It has a round floor, and in the middle of the floor the relic-shrine or daghoba with, round it, a circle of twelve plain octagonal pillars. An aisle runs all round between the pillars and the walls. The doorway in front is broken but from a part which remains on the left it appears to have been very broad. The relic-shrine or stupa in the middle of the circular floor is twenty-five feet in diameter. It consists of a plain drum-like plinth with, upon it, a rather elongated semicircular dome, differing from the flat and round domes of the other Junnar chapels. The plinth is 4' 4" high and 25' 5" round and the dome 5' 2" high and 22' round. The dome does not seem to have had a large capital but a small plain capital like a plate, part of which is broken. In the middle of the plate is a hole, 7" squre and about a foot deep, probably to support the umbrella. Both the plinth and the dome are cracked. About four feet from the *stupa* is a circle of twelve plain octagonal pillars well smoothed and polished and each 11 feet high and about 1'7" in diameter. Traces show that the pillars were painted more richly than those of and other of the Junnar caves. Between the pillars and the round wall runs the aisle about 4' broad. The cave ceiling or roof is dome-shaped like a hollow half globe placed over a circle, and supported on the pillars over a circular beam about 5' thick and 2' broad. The aisle roof inclines from the top of the beam over the pillars. The wall all round is about 9' 2" from the floor.

The whole cave appears to have been painted. In the aisle roof, in the lower circle of the dome roof, and on the pillars, patches of colour are still left. Much of the wall to the right of the doorway is lost. From what remains of the left wall there appears to have been a doorway between two large windows 7' high and 1' 7" from the floor. The windows

appear to have had grooves for wooden frames. The front of this cave is masonry built and a court in front of it, twelve feet wide, is protected by a masonry wall.

Cave III

Cave III. close to the left, is a small dwelling, originally in three parts, an open narrow veranda with a cell to the right, a middle room, and two cells in the back wall. The cave has been made into a shrine of the goddess Tulja. The partition and front walls of the two back cells have been broken, and in the right wall of the right cell is cut an ugly figure of the goddess 3' high with eight hands and riding a lion. Her first right hand holds a dagger and rests on her hip, her second holds a trident, her third a sword, and her fourth the tail of the lion. The first left hand holds the lion's head, the second a shield, the third a bow and arrow, and the fourth a mace. On her neck is a necklace and on her head a crown. In front is a small altar of dressed stones 1' 8" broad and 1' 5" high, and over the altar are two modern pillars with a Moghal arch over them. In front of the shrine is a tortoise carved out of the base of the partition wall. The floor has been dressed and slightly sloped.

Cave IV.

Close to the right is Cave IV. a row of three cells. The partition walls of the three cells have been blown away with gunpowder, probably to make a good sitting hall near the shrine of the goddess. The front of the cell floors has been broken and closed with modern masonry.

Cave V.

Cave V". close to the right of cave IV. is a small cell on a rather unusual plan. The doorway, 2' 5" wide, leads to a small passage 7' deep 3' 5" broad and *T* high and the passage to a cell 7' square and 7 high.

Cave VI.

Cave VI. close to the right of cave V. consists of two cells side by side. The cells are on the same level and are equally well dressed. The first cell is 7' square and 7' high, and in each of its side walls three holes face one another, probably to support a wooden bench. The doorway is 2' 3" wide. The second cell is 7' square and 7' high. The front of the veranda of both is entirely broken; both are hard of access.

Cave VII.

Cave VII. is close to the right of cave VI. As the partition wall between it and the right cell of cave VI. is broken, the two Cells appear as one. But the horse-shoe arch and other ornament in front over its doorway marks it a separate cave. It is 7' 6" Iquare and 7' 6" high. Its left and front walls are broken. Over the doorway, resting on ribs, is a horse-shoe arch. On the front face of the arch is some ornamental work. Below the arch over the

doorway is lattice work carved as in Manmoda cave XXXVI. [See above p. 181.] Above the lattice work is a small pentagonal symbol. By the side of the main arch are two small arches, and between the main and each small arch is some lattice work. By the side of each small arch is cut a relic-shrine in half relief with an umbrella. To the left of the relic-shrine is a man bowing and on the right a man and woman approach the relic-shrine. On either side high up is an angel floating to the shrine. Near the right relic-shrine stands a Naga Raja and above a floating angel. Higher up a band of rail pattern extends along the entire ornament.

Cave VIII.

Cave VIII. close to the right of cave VII. consists of two cells. side by side. Their front, partition walls, and floor are broken. Both cells are almost entirely gone and have nothing of interest.

Cave. IX.

Cave IX. close to the right of cave VIII. is a dwelling with two cells, with their partition and front walls broken. The left cell is 7' 6" x 7' 9" x 7' 7" and the right 7' 8' x 7' 7" x 7' 10". In front, over, the doorway of each cell, two horse-shoe arches rest on ribs, and; between the two arches and on their sides is the rail pattern. Below each arch in the wall is semicircular lattice work. By the side of each large arch is a small arch, and between all the arches is lattice work in the round pillow fashion. Over the entire sculpture is a band of rail pattern.

Cave X.

Cave X. close to the right of cave IX. is a dining hall or *bhojanamandapa*, 23' 2" broad 30' deep and 8' 5" high, without a front wall. Along the back right and left walls is a bench. In the right wall, near the front, is a cell 10' 1" broad and 7' 10" deep, probably the kitchen or the place for doling out their meals to the monks. To the left is a broken cistern and to the right five cisterns filled with earth.

Cave XI.

About fifty feet further to the right is Cave XI. a dwelling two parts, a passage and a cell in the left wall. The passage has a bench along about half its left wall and another in a recess in the back wall. To the left of this cave are some excavations entirely filled with earth brought by the rains.

Ganesh Lena Caves.

In the long range that bounds Junnar to the north, part of which is known as the Hatkeshvar and part as the Suleman hills, one chief spur about a mile to the north of the town ends in a great rounded scarp about a hundred feet above the plain. This scarp has been cut into a long row of caves, the chief of which, one of the largest caves in Western

India, has been turned into a temple of Ganpati and given the group the name of the Ganesh Lena or Ganesh Caves. The way to the caves is through the north part of the town, across the Kukdi, through some rich garden land with sugarcane plantains and richleaved mangoes and tamarinds, up the under slopes of the hills, most of the way shaded by mango trees, said to have been planted by Amritrav, the adopted son of Raghunathrav the sixth Peshwa (1773 -1774) and with some rich garden land on the west.

Nearly a quarter of the way up the hill side is made easy by ten flights of forty-five modern steps of well dressed masonry built in detail by people whose prayers the god Ganpati has granted. Above, the path is steeper in places with rough masonry and undressed stones or old rock-cut steps. The caves look out over the bare lower slopes of the hill with rock and bleached grass broken by patches of rich garden land, to the river whose course is marked by tree and gardens. Behind the river are the houses and trees of Junnar, and beyond, the waving out-line of the Manmoda hills. To the south-west stands the block of Shivner with its great natural bastions and rounded top, and to the west the Kukdi valley with scattered trees and garden hollows bounded by the east face of the Tulja range. Beginning from the east or right, Cave I. is a dwelling in four parts, a veranda, a middle room, a cell, and a half cell. The veranda is 3' 9" deep 14'11" broad and 7' 2" high, with, along the right wall, a bench 3' 6" long 2' 5" broad and 2' 5" high. Its front appears to have had two quadrangular pillars of one of which a trace remains in the ceiling. Over the pillars rested the rock beam, over the beam project ribs, and over the ribs in front was the rail pattern which is now lost. Below the veranda, in a recess to the right, is an earth-filled cistern. A doorway 2' 6" broad and 6' 10" high, with a small window to the left, leads into the middle room. The middle room is 5' 8" deep 12' 6" broad and 7' high and along its right wall has a bench 2' 5" broad 5' 8" long and 2' 5" high. In the back wall to the left is the half cell and to the right the cell. The half-cell is 3' 8" broad and 8' 3" deep, and along its right wall has a bench 2' 4" broad 7' long and 2' 5" high, with, in the left wall facing the bench, a window 2' square communicating with cave II. A door, 2' 4' broad and 6' 3" high with grooves for a wooden frame, leads into the cell which is 9' broad 7 deep and 610" high, with, along its right wall, a bench 7 long 2' 6" high and 2' 5" broad.

Cave II.

Cave II. close to the left or west of cave I. is almost on the same plan as cave I. only differing in the position of the cell and the half cell. In front is a veranda 11' 8" broad 3' 8" deep and 7 high, with, in front, two pillars and two pilasters of which the right pillar and pilaster are partly broken. Between each pillar and pilaster is a bench with curtains on the back, the right curtain broken. On the front or south face of the curtain is the rail pattern. Over the pillars rests the rock beam and over the beam the ceiling. In front over the beam project rock imitations of rafters, their ends standing out from a thinner stone beam. Over the beam in front is the rail pattern, and over the rail the rock projects about two feet.

A doorway, 2' 3" wide and 5' 9" high, with grooves for a wooden frame, leads into a middle room 15' broad 8' deep and 7' high, with, along the entire left wall, a bench 2' 8"

broad and 2' 5" high. In the back wall to the left is the cell, and to the right the half cell. The cell is 9' 7" deep 6' 8" broad and 7' high, and along the entire back wall, is a bench 2' 7" broad and 2' 5" high. The cell door, with grooves for a wooden frame, is 2' 6" broad and 6' 7" high. The half cell is 4' 4" deep and 2' 9" broad, with, along the back wall, a bench 2' 5" broad and 2' 3" high.

Cave, III.

Cave III. close to the left of cave II. is a small dwelling consisting of a cell and an open veranda. The veranda is 15' 11" broad and 5' 7" deep, and in front of the doorway has, along the entire back wall, a bench 1' 6" high and 2' broad. A door, 2' 6" wide and 6' high, leads into a cell 8' deep 8' 4" broad and 6' 11" high, with, along the left wall in a recess 7' 4" long 2' 6" broad and 4' high, a seat 2' 6' high am as long and broad as the recess. In front of the recess, below the seat, are vertical bands. Between caves II. and III., in a recess in front, is a seat.

Cave IV

Cave IV. close to the left of cave III. is a dwelling consisting of a cell and an open veranda. The veranda is 16' 3" broad 5' 8" deep and 8' 3" high and, along its back wall, in front of the doorway has a bench 2' broad and 1' 6" high. In the bench close to the right of the doorway is a small hole, probably for water to wash the feet before entering the cell. A grooved door, 3' 5" wide and 7' 5" high, with a partly broken window to the left, leads to the cell which is 16'3" broad 10' 10" deep and 8' high, and along its entire right wall has a bench 2' broad and 2' 2" high.

Cave V.

Cave V. to the left of cave IV. is about twelve feet lower. It is a seven-celled dwelling or *saptagarbha layana*. It is in three parts, a veranda a middle hall and seven cells, three in the back wall and two in each side wall. The middle hall is 29' 4" deep 26' broad and 8' 5" high. Along the back and side walls in front of the cells runs a bench 1' 9" broad and 1' high. The doorway is 5' 3" broad and 8' 5" high, and about two feet on either side is a window 2' 6" high and 2' 3" broad. The seven cells vary in depth from 9' to 10', in breadth from 7' to 8', and in height from 6' to 7'; and each has a bench in the back wall. The veranda is 19' 8" broad 6' deep and 9' 1" high and had two pillars and two pilasters with pot capitals of the Satakarni period (B.C. 90-A.D. 300), of which only the right broken pilaster and a trace of the base of the right pillar remain. Much of the veranda ceiling has been broken. In front of the veranda, an open court with two steps leads to the veranda. To the right of the court is a cistern. In the back wall of the veranda, to the left of the doorway, close under the ceiling, is Inscription 30 well carved in one line. In the beginning is the Buddhist trident and at the end the *svastika* or lucky cross. The inscription may be read:

Inscription 30.

Dhanikaseniya Satagabham podhi cha deyadhamam and may be translated 'A meritorious gift of a seven-celled cave and cistern by a guild of corndealers.'

To what place the guild belonged is not stated. It was probably Junnar.

Cave VI.

Cave VI. close to the left of cave V. is a chapel cave or *chaitya vihar*. In its general inward plan it is much like Ajanta cave IX. [Compare Bombay Gazetter, XII. 535 - 539.] It is entered by five steps and consists of a veranda with pillars and pilasters and a shrine. The shrine or chapel measures 43' 8" by 22 8' wide and on each side has a row of five pillars and one pilaster with side aisles 3' 8" broad and a central relic-shrine or *chaitya* near the back of the chapel. The pillars are of the Satakarni period (B.C. 90 - A.D. 300) with eight-sided shafts and waterpot bases and capitals. The pillars begin with bases of four plates, each smaller than the plate below, then a waterpot, above the pot an eightsided shaft, above the shaft a reversed pot, then a capital in five plates, and on the top a belt in the *amalaka* or cogwheel pattern. [The details of the pillars are: whole height 10' 11"; each of the eight facet of the shaft about 7' circumference, of the shaft 5', the base 1'; lower pot 1' 10"; the shaft 4' 7"; the inverted pot 1' 7"; a square plate 2', an amalaka belt 3 ½; the plate capital 10", and the animal capital 29".] Except the right pilaster all have figures of animals on the capitals sitting with inverted faces. On the left, above the pilaster next the door, is a lion, on the first pillar are two elephants, on the second pillar a sphinx and a lion, [The head of the lion is broken; the feet of the sphinx are like the hoofs of a ball and the face human with ear ornaments.] on the third pillar two elephants, on the fourth two tigers, and on the fifth two elephants. On the right side the pilaster next the door has no animal capital, the first pillar has two elephants, the second two tigers, the third two well carved elephants, the fourth two tigers, and the fifth two elephants. Hollows in the fronts of the pillars are probably the result of an attempt to break them in search of treasure. Behind the relic-shrine, in a curve, are six eight-sided pillars. The aisles are about 3' 8" broad and 12' high. The walls go up straight 7' 6", resting on a beam above the backs of the animal capitals, and above that rise in a pointed arch about 4'8", the whole height to the centre of the vault being 24' 8". Along the roof are stone imitations of vaulting wooden ribs as at Karle, thirteen on each side and six at the back. Between each pair of stone ribs is a hole as if for something wooden. Part of the seventh rib on the right side has broken away and been mended with wood which has disappeared. The side aisles have their ceilings marked with stone ribs like the central roof.

The relic-shrine or *daghoba* is in shape much like the relic-shrines of the Gotamiputra period (A.D. 35-1507) with round domes. The plinth, which is 4' 7" high and 27' 7" round, is ornamented at the foot with a thin round plate, and at the head with a 4" band with forty-five projecting teeth, and over the band a 2" moulding surmounted by a 1' 1" band of rail pattern. Over the rail band is a terrace 9" deep, and above is the dome nearly three quarters of a circle, 26' round and 6' 5" high of which 5' 3" show above the rail. Above the dome is a small block 6' high 3' broad and 2' 6" long, and above the block a quadrangular shaft 2' 6" broad 2' 1" long and 1' 9" high with rail pattern. The shaft

supports a tee in six square plates, each plate bigger than the plate below, measuring altogether about 3' 1" high. The sixth or top plate is 5' 8" square, and over it is a seventh square plate about 2" bigger than the sixth plate and about 7" thick. On the front face of the seventh plate, on the two corners, are two half pyramids and in the middle four whole pyramids, each pyramid in shape like five plates laid one over the other, each upper plate larger than the plate below it. Between each pair of pyramids are five well executed and ornamented Buddhist tridents. In front of the relic-shrine is a hole for garlands. On the top are a central and four corner holes about a foot deep. The central hole was probably for a wooden umbrella which has disappeared, and the side holes for flags.

The door of the chapel is 5' 11" broad 9' 2" high and 2' thick, and has sockets for a large wooden frame above and in "the floor. On the left door face are symbols, or perhaps letters, which have not been understood or identified. The veranda is 20' 8" long 6' 8" broad Mid 12' 4" high. In front are two pillars and two pilasters in the same style as the chapel pillars except that the belt of cogwheel pattern is protected by a square open boxlike section. The pilasters and pillars have animal capitals on the inner and outer faces. The pilasters have each a single tiger and the pillars two elephants facing each other. The elephants, which seem to have had riders, and the tigers on the outer faces are spoilt. Above the animals the roof projects a little but is now greatly broken. Above is the rail pattern and above the rail the arch. On either side of the arch the work is unfinished.

Inscription 31.

On the back wall of the veranda, under the ceiling and above the doorway, is Inscription 31 in large deep cut letters and well preserved. The inscription reads: Kalianasa Heranikaputasa Sulasadatasa ekapurisasa chetiyagharo niyuto deyadhama and may be translated

' A meritorious gift of a chapel cave by the distinguished Sulasadata, son of Heranika of Kalya'na.'

The inscription shows that this chapel is the gift of one Sulasadata son of Heranika of Kalyana in the Thana district. The name Heranika is from Sk. Hairanyaka and may also mean a goldsmith. But as 'son of' is mentioned, Heranika is probably a proper name as, if he was a goldsmith by profession, he would simply be called a goldsmith and not designated son of a goldsmith. The inscription begins and ends with the well known svastika mark.

Between this and cave V. on a rather high level, is an excavation originally intended either for a dwelling or for a seat. On its left, side is a bench. As the builders came across a fault in the rock, it' has been turned into a cistern.

Cave VII.

Cave VII. close to the left of cave VI. on a slightly higher level, is the largest of the Junnar caves. It is a large hall without pillars or other support, 57' long by 51'broad and

11' 1" high, in plan much like Nasik cave X. The difference between the two is that the Nasik cave has a *daghoba* or relic-shrine in half relief between the third and fourth cells in the back wall, while this cave has no relice-shrine. If this cave once had a small relicshrine all trace has been removed, as the third and fourth cells in the back wall have had their partition wall broken away and been made into a Ganpati shrine, and the front walls have been broken and a large doorway, as broad as the two old doorways, has been opened. It is there-fore possible that like Nasik cave X. this may have once had a relicshrine. The cave is in three parts a hall, twenty cells, and a veranda. The hall is 57' deep 51' broad and 11' 1" high. Half of the hall wall have been plastered with clay, whitewashed, and daubed with modern paintings, chiefly of Devi, Krishna, Narayan, and Shiv on the left wall; and on the back wall scenes in Krishna's life, a Yogi, Ganesh, Garud, Hanuman, the marriage preparations of Ganpati, and in a recess a two-headed and four-handed Ganesh and his fight with a Rakshas. The right wall has paintings of Ganpati's childhood, his Hallisaka dance, himself in the middle and women around him, and Ganpati's procession on his rat-carrier. All along the side and back walls runs a bench 1' 10" broad and 1' 6" high.

Carved on the left wall, between the cell doorways, are nine Sati monuments of later times and worthy of note as typical North Deccan Sati memorials. In shape each is like a long pillar with an arched top. Three of the monuments are plain without sculpture, the other six have sculptured panels. To the right of each of these pillars is a hand raised above the elbow, with the palm open, in token of the Sati's blessing. The panel sculptures are mostly worn away and spoilt, but the first engraving from the right clearly shows what they originally were. It is in three panels. In the lowest panel the Sati is shown burning with her husband's body, supporting his right hand and leg on her lap. Flames rise from the pile. The middle panel shows the Sati going on horseback to the funeral pile. Her hands are raised over her head and she rides to her death apparently in high spirits. [The progress of the Sati to the funeral pile was formerly marked by several special practices. In some places she Went to the burning ground richly dressed. scattering money and flowers, and calling out the name of God, with music sounding and drums beating. In some parts the Sati used to mark with her hands the gateways and walls of the chief temple or the chief gateway. She also marked with her hand-marks some stone in her house for her family to worship, and on this stone it was usual for her children or relations to cut the original out. In honour of Satis well-to-do people, chiefly Rajputs, used to build *chhatris* or shades in temples and at burning places. In some parts, as at present in Nepal, a wooden seat, called *pat mandvi*, is prepared to carry her, the seat and her silk robe going as coveted presents to the state. In other parts of the country, as shown in this memorial, she was carried on an elephant or on horseback. The arrangements for the pile also varied. In Gujarat and Cutch the wife sat in a specially built grass hut, and keeping her husband's head on her lap supported it with her right hand, while she kindled the hut with a torch held in her left hand. At present in Nepal the husband and the Sati are made to lie side by side on the pile. The woman's right hand is put under the husband's neck, and round the woman's face are placed inflammable materials, camphor, resin, nitrate of potash, sulphur, clarified butter, oil, and grass. Three long poles of undried wood are laid over the bodies, one over the legs, the second over the chest, and the third over the neck. Three men on each side press down the poles until

the woman is burnt to death. In one instance, when the poles were carelessly held, a Brahman Sati ran from the pile and crossed a river, but was brought back by her friends and burnt.] The topmost panel shows the woman worshipping Mahadev with her husband. These Sati memorials are of about the time when the cave was dedicated to Ganpati, and the memorials were carved here as it was a holy Brahmanical shrine, the Ganpati of this cave being regarded as one of Ganpati's eight chief forms or ashtavinayakas. [See below Ojhar.] Along the right and left walls are seven cells each and six along the back wall making twenty as at Nasik. Of the back cells, the middle two have had their partition walls broken as also the benches along their back walls. In the middle, in the vacant space between the old benches, is carved 'a rude image of Ganpati with a thick coating of redlead and clarified butter which people have been pouring for centuries. Over Ganpati is a wooden mandap plated with brass, the gift of Junnar Brahmans. The shrine doorway, made of two cell doorways, consists of lattice work on either side, and in the middle a small wooden door. The bench in front has been cut down into a step. Except the shrine all the back cells are closed with wooden doors and used as store-rooms. The side cells vary in size from 8' to 9' 6" deep, 7' to 8' broad, and about T high, and have each a grooved doorway about 2' 6" wide. Except the sixth right wall cell and the first and sixth of the left wall, all the cells have benches along the back wall, 2'8" high and-2' 4" broad.

The hall is entered by a large middle doorway and two smaller side doorways with, between the middle and each side doorway, one large window. The middle doorway is 7' 4" broad and 11' 2" high, the left side door is 2' 7" broad and 7' high, and the left window 6' long and 4' high. The right side door is 2' 8" broad and 7' high, and the right window is 6' long and 3' 10" high. The middle and side doorways are grooved for wooden frames; the sockets in the middle doorway are for a very large door.

The veranda, which is 44' 6" broad 7' deep and 12' 7" high, has, in front six pillars and two pilasters, and between the two middle pillars is an opening leading from the veranda into an open court. Between each pillar and side pilaster is a bench, 1' 7" broad and 1' 4" high, with the pillars over them and curtains 1' 5" high behind them. On the back of the curtain is the rail pattern and below the rail pattern vertical imitations of wooden bars. The pillars have octagonal shafts and over the shafts pot capitals of the S'atakarni type. Over the outer face of the capitals are animals now mostly broken. Going from the right to the left, on the first pillar are two lions, on the second pillar two bulls, on the third pillar two elephants with riders, on the fourth pillar two elephants with riders, on the fifth pillar two bulls, and on the sixth pillar two tigers. The pilasters have each two tigers. On the left bench are Cut three large holes or kundis, with small exit holes fitted with small wooden or metal pipes, and closed with temporary stoppers, being intended to allow water from the holes to wash the feet of visitors. The veranda ceiling, which is marked with ribs, projects a little in front of the pillars and over the ceiling stands out the roof with the rail pattern on its front. Most of the open court in front of the veranda, which is as broad as the veranda and about 5' deep, is broken. To the right of the court several steps are cut from under the rock. As most of the court floor is broken, the passage by the steps is unsafe, and modern steps have been cut to the right of the veranda and joined with the old steps below. Below the court are five cisterns, one of which holds water.

Cave VIII.

Cave VIII. a little to the left of cave VII. and on the same level, is a dwelling cave difficult to reach. It consists of a veranda with a cell and a half cell in its back wall. The roof and left side wall of the veranda are almost entirely broken, but enough is left to show that the veranda was 19' 4" long by 5' 4" broad and 6' 7' high. A broken door with a small window to the right leads to the cell, 6' 10" deep 9' 1" broad and 6' 7" high, with a benched recess to the left, 6' 3" long 2' 6" broad and 3' 1" high. In the back wall near the extreme right end, is a peg hole. To the right of the cell, entered from the veranda, is the half cell 12' 1" long and 4'3' broad. The half cell has an open front and a bench in the back wall III' deep 4' 3" broad and 2' 3" high.

Cave IX.

Cave IX. is close to the right of cave VIII. the way to it being from the veranda of cave VIII. It appears to have had a front entrance but the rock is broken. The cave is a large hall and a veranda. The hall is 31' 7" broad 23' deep and 9' high, with, in the middle of the front wall, a large doorway 6' broad and 8' 10" high and a side doorway on the left 3' broad and 8' 8" high. Both doorways have grooves in the floor for wooden frames. On either side of the middle doorway is a window, the left window 4' broad and 5' high and the right window 4' 3" broad and 5' high. The veranda floor is two feet lower than the hall floor which has two steps. The veranda is 31' 6" broad and 5' 3" deep and had four S'atakarni pillars of which the broken bases remain. It is hard to say for what purpose the hall was used, except perhaps, as a school or study. It differs in plan from dining halls or *bhojanamandapas* which have benches along the side and back walls and no front wall. It is not a *layana* or dwelling cave as it has neither cells nor stone benches, and it is not a shrine as it has no object of worship.

Cave X.

Cave X. to the left of cave IX. but on a higher level, is difficult to reach as its front is broken. It is a dwelling consisting of an open veranda, a middle room, and in the back wall of the middle room a half cell and cell. The veranda, with broken floor and ceiling, is 22' 10" broad and 6' 4" deep. A grooved broken doorway, 4' 5" wide and 6' 4" high, with, on either side, a window each 2' 1" square, leads to the middle room which is 18' broad 5' 6" deep and 7' high, and in the right wall has a recess 2' 3" broad and 4' high with a seat 2' 6" high. To the left, in the back wall of the middle room, is a cell 9' 3" deep 3' 11" broad and 7' high, with, along its back wall, in a recess 3' 8" long 2' 5" broad and 4' high, a seat 2' 6" high. A doorway, 2' 8" wide and 6' 10" high, leads on the right to the cell which is 8' deep 8' 4" broad and 7' high, with, on the left, a recess 2' 3" broad 7' long and 4' high with a seat 2' 9" high. Traces of painting remain on the ceiling. Outside the veranda to the left is a cistern.

Cave XI.

Cave XI. close to the left of cave X. and rather hard to reach, is a hall 15' 2" deep 23' broad and 7' 10" high with a broken front. In the left wall is a cell, 5' 10" deer.6'10' broad and 7' high, its floor 6' higher than the hall floor, and its ceiling 5" lower than the hall ceiling. It has a grooved doorway 2' 7" wide and 6' 10" high. In the back wall is a recess, 6' long 2' 8" broad and 4' 6" high, with a seat 2' 4" high. Traces in the ceiling show that the cave was painted. Outside, about four paces to the right, is a recess with a view seat.

Cave XII.

Cave XII. close to the left of cave XI. is a small dwelling entered by a door from the veranda of cave XI. It consists of an open veranda, a middle room, and in the back wall of the middle room a half cell and cell. The middle room, which is entered by a doorway 3' wide and 7' 1" high with a small window 1' 6" square to its left, is 12' 8" broad 5' 8" deep and 7' 3" high, and in its right wall has a seat recess 5' 4" long 2' 7" broad and 4' 6" high, the seat 2' 7' from the floor. To the left, in the back wall of the middle room, is the half cell 7' 8" deep 3' 2" broad and 7' 1" high. In its left wall is a seat recess 6' long 2' 6" broad and 4' high, the seat 2' 4" from the floor. The ceil is 7' deep 6' 11" broad and 7' high with a grooved doorway 2' 8" wide and 6' 10" high. The veranda, whose floor and ceiling are partly broken, is 19' 3" broad and 5' deep. In the back wall of the veranda, to the left of the doorway, is a bench *V* broad and 1' high, and to the right of the doorway, a seat recess 5' 5" long 2'5" broad and 3' 11" high, the seat being 3' high. The cave was painted, and concentric circles of painting are still seen in the ceiling of the middle room. The middle room floor and half of the cell floor has an inch-thick coating of excellent cement much of which is damaged.

Cave XIII.

Cave XIII. close to the left of cave XII. but on a slightly higher level, is a small dwelling in four parts, an open court, a veranda, an inner room, and in the back wall of the middle room a cell and a half cell. The middle room is 12' 5" broad 7' 9" deep and 7' high with, along the right wall, a bench 2' 7" broad 2' 7" high and 7' 9' long. The ceiling has remains of painting. To the left is a seat recess 2' 5" broad 7' 4" long and 4' 4" high, the seat 2' high. In the back wall to the left is the half cell, 10' 3" deep 5' 7" broad and 7' high, with a bench in the right wall. The cell is 7' deep 6' 4" broad and 7" high with a grooved doorway 2' 5" wide and 7' high. The main doorway is 2'9" wide and 6'11" high and has grooves for a wooden frame. To its left is a window 2' 2" square. The veranda is 16' 4" broad 4' deep and 7' 1" high and has, along the right wall, a bench 4' long 2' 6" broad and 2' 3" high. In front of the veranda were two benches, 1' 4" broad and 1' 3" high, with curtains now broken. Over each end of each bench rested a plain eight-sided pillar and pilaster, of which the right pilaster and part of the right pillar remain. On the right pilaster is the double crescent ornament. , The court in front, from which two steps lead to the veranda, is 13' 8" broad and 6' 6" deep. To the right of the court is a dry cistern.

Cave XIV,

Cave XIV. close to the left of cave XIII. is a chapel cave or *chaitya vihar*, quadrangular, with a flat roof. The shrine is 12' 11' broad 22' 2" deep and 13' 8" high, with a grooved doorway 5' 11" wide and 11' 11" high. The relic-shrine is twelve feet from the doorway. Its plinth is 4'9" high. At the foot are three round; plates each smaller than the one below it, and above the plates a drum 21'3" in circumference. Above the drum is a row of thirty-two teeth, and above the teeth a one-inch moulding which completes the plinth. Above the plinth is a band of rail pattern 10' high, and above the rail band a round dome 3' 9" high and 20' 7" in circumference. Above the dome is a square shaft with rail pattern 10' high and 1' 10" broad, and above the shaft is a five-plated tee about, 1' 7" high, the top plate 4' 5" square. Crowning the whole is an umbrella cut out of the ceiling. In front of the shrine is a veranda 10' 9" broad and 2' 9" deep, with, in front, on a space 2' 6" broad, two S'atakarni pillars and two pilasters, on which rests a beam. Above the beam ribs project from the ceiling. In front of the veranda a court, 20' 2" long and 9' broad, is entered by four steps three feet below the veranda. The left wall of the court has a broken relic-shrine or daghoba in half relief and the same wall had a doorway loading from the veranda of cave XIII. In the back wall of the veranda, to the left of the doorway under the ceiling, is Inscription 32 very well cut in two lines. The inscription reads:

Inscription 32.

- (1) Kapila upa'sakasa natuno ta'pasa upa'sakasa
- (2) putasa a'nadasa deyadhammam chetiyagharo niyuto

and may be translated

A meritorious gift of a chapel cave given by A'nanda, a son of Ta'pasa an Upa'saka, and grandson of Kapila an Upa'saka.'

Cave XV.

Cave XV., close to the left of cave XIV. on a higher level, is a small dwelling consisting of a cell and a veranda. The cell is 7'11" broad 7 9" deep and 7 high with an unproved doorway 2'7" wide and 6'2" high. The veranda is 16' broad 6'3" deep and 6'3" high. The side walls are preserved but the ceiling is half broken.

Cave XVI.

Cave XVI. close to the left of cave XV. on a slightly higher level, is a small dwelling consisting of a cell and a veranda. The cell, which is 8' 4" deep 10' 8" broad and 6' 11" high, has, along its right wall, a bench 2' 5" broad and 2' 7" high. The doorway is 2' 11" wide and 6' 5" high. The veranda is 11' 11" broad 3' deep and 6'6" high. Both the side walls and part of the ceiling are broken.

Cave XVII.

Cave XVII. close to the left of cave XVI. consists of three small dwellings which look like separate caves but they are in one row in the same veranda. The first dwelling is in two parts, a middle room 12' 11" broad 5' 3" deep and 7' 4" high, with a doorway 2' 11" broad and 7' 4" high, and on either side of it a broken window. In the back wall is a cell to the right and a half cell to the left. The cell is 7' 6' broad 7' 5" deep and 7' 4" high, with a door 2' 10" wide and 7' 4" high, and to the left of the door a window. The ceiling has remains of painting. The half cell is 4' 8" broad 7' deep and 7 4" high with a bench 2' 7" high and 3' broad. The bench ceiling is 8' lower than the hall ceiling and projects a little in front of the bench. The second and third dwellings are close to the left of the first dwelling. A soft layer of clay has cut off much of the upper part of the cave but what remains is well preserved. The second dwelling is in two parts, a middle room, a half cell to the left, and a cell. reached from the. right of the half cell. The middle room is 7 deep 15' broad and 7 high, with, along the right wall, a bench 2' 5" broad and 2' 5" high. The doorway is 3' 4" broad and 6'10" high. The half cell is 4' 6" broad 13' 8" deep and 7 high, and in its back wall has, in a recess 2' 5" broad 4' 6" long and 3' 8" high, a bench 2' 5" broad and 2' 3" high. A grooved door in the right wall of the half cell, 2' 7" broad and 6' 8" high, leads to the cell 74" broad 7'4" deep and 6'8" high, with, along the back wall, a bench 2' 4" broad and 2' 7" high. In the right wall was a window looking over the middle room. In front of the doorway is a bench 1'8" broad and 1'8" high. The third dwelling is the largest of the three. It consists of a middle hall, and, in the back wall of the hall, two cells and two seat recesses. The hall is 25' broad 15' 10" deep and 7 4" high, and along the right and back walls has a bench 2' broad and 1' 10" high. The right cell is 7 broad 8' 9" deep and 6' 5" high with a grooved doorway 2' 8" wide and 6' 4" high and a window to the left of the doorway. The left cell is 7 wide 8' 6" deep and 6' 4" high with a grooved doorway 2' 6" wide and 6' 4" high and a window to the left of the doorway. Along the back wall of each cell is a bench 2'2" wide and 2' 3" high. The seat recess at each corner of" the back wall is 3' 8" long 2' 7" broad and 3' 3" high. The hall door was 5' 8" broad and 7' 4" high. In front of the hall door is a bench 1' 8" broad and 1' high. In front of the veranda are holes for. wooden pillars but much of it is broken. To the left of the veranda are two cisterns. Between this cave and cave XVIII. are three other cisterns. In the recess of the first cistern is Inscription 33. It may be read:

Inscription 33.

- (1) Kalianakasa Kudiraputasa
- (2) Suvanaka'rasa Saghakasa podhi deyadhammam

and may be translated

' A meritorious gift of a cistern by Saghaka a goldsmith, son of Kudira of Kalya'na.'

Inscription 34.

In the recess of the second cistern is Inscription 34. It may be read:

- (1) Isimulasa'mino bhaya
- (2) Nadaba'lika'ya Na'dakatorikasa
- (3) Lachhinika'ya deyadhama podhi and may be translated
- ' A meritorious gift of a cistern by Lachhinika (wife) of Torika the Na daka [and] Nadaba'lika wife of Isimulasa'mi.'

Cave XVIII

Cave XVIII. follows the three cisterns. It is like a dining hall except that it has a front wall, with, in the middle, a grooved door, 5' 8' wide and 7' high and on either side of it a window 3' 3" broad and 2' 9" long. The hall is 29' 9" deep 24' 8" broad and 7' 4" high with a bench 1' 7" broad and 1' 2" high along the entire back and side walls. The passage to the hall is by three broken steps and on either side of the steps are broken benches 1' 8" high and 1' 8" broad. In front is an open court about 6' broad. Outside, to the left of the court, is a cistern of good water.

Cave XIX.

Cave XIX. about ten feet to the left of cave XVIII. is a cell without a from wall It is 13' 10' broad 9' 9" deep and 6' 4" high with, along the left wall, a bench 6' 9" long 1' 2" broad and 1'1' high. The ceiling shows signs of a dressed stone or wooden screen from the right wall to the end of the bench. To the right is a small cell in the same roof probably connected with cave XIX. The cell is 8' deep 8' broad and. 6' 8" high, with, along the right wall, a bench 2' 2" broad and 2' 7" high. The grooved doorway of the cell is 2'6' broad. The cave has two cisterns one to the left and another between it and the cell.

Cave XX

Cave XX., close to the left of the cistern, is a small dwelling hard to reach as the rock in front is broken. To the right is a passage 11' deep 3' broad and 7' high, and to the left a cell 10' 5" broad 10' deep and 7' high, with, along the entire left wall, a bench 2' 6' broad and 2' 7" high. The cell doorway is 2' 8" broad and 7' high.

Cave XXI

Cave XXI. close to the left of cave XX. is out of reach except by a modern hole cut through the cell of cave XX. It is a small dwelling consisting of a veranda and an inner cell. The cell is 10' broad 7' deep and 7' high, with, along the left wall, a bench 2' 1' wide and 2' 7" high. The cell door is grooved, 2' 7" wide and 6'6' high. The veranda is 16' 5' broad and 4' deep. To the left, in the veranda, is a seat recess.

Cave XXII.

Cave XXII. close to the left of cave XXI. is a dwelling consisting of a veranda, and in the back wall of the veranda a half cell to the left and a cell to the right. The cell is 8' broad 6' 9" deep and 6' 8" high, with, along the entire back wall, a recessed bench 2' 4" broad and 2' 7' high. In the left wall a window looks into the half cell. The cell has a grooved door 2' 8' wide and 7' high. The half cell is 4' broad 9' 9" deep and 7' high. The veranda is 19'5" broad and 5' deep, and in its back wall, to the right of the doorway, has a large seat recess with a seat 6' long 2' 10" broad and 3' high. In the left wall of the veranda are the remains of a doorway which led to an open sitting space 13' 9" broad and 5' deep with, in the back wall, a seat recess. To the right of the recess, under the ceiling, is Inscription 35 which reads:

Inscription 35.

- (1) Sa'marupa'sakasa putasa
- (2) Sivabhutisa deyadhama lenam
- (3) Kapichite sanghasa niyutam ka?

and may be translated

'The meritorious gift of a dwelling cave by Sivabhuti the son of Samara an Upa'saka, dedicated to the Congregation of Kapichita' [Kapichita is probably the name of the monastic establishment in the Ganesh Lena hill.]

Cave XXIII.

Cave XXIII. close to the left of the open space, consists of a veranda and two cells in its back wall. The left cell is in two parts, a front room and a half cell in its back wall. The front room is 8' broad 8' deep and 7' 4" high, with a door 2' 7" wide and 6' 10" high. The half cell is 3' 3" broad 7' 10" deep and 6' 10" high, with, along its entire left wall, a recessed bench 6' 9" long 2' 8" high and 2' 6" broad. The right cell is 8' broad 8' deep and 7' 3" high, and in its back wall, in a recess 7' long 2' 7" broad and 4' high, has a bench 2'5" from the floor. The cell door is 2'6" wide. The veranda is 19' 6" broad and 3' 7" deep. Between the two cells in the back wall of the veranda, close under the ceiling, is a smoothed space 2' long prepared for, but without, an inscription. To the left is a recess-like excavation.

Cave XXIV

Cave XXIV. about a hundred feet to the left of cave XXIII. is very hard to reach as the rock in front of it is broken. A cistern is first reached, then a long seat recess, with, on either side of it, a small seat recess all three in an open sitting space. In the broken left wall of this open space, a broken door three feet wide leads to the veranda of cave XXIV. The cave consists of a veranda, and in the back wall of the veranda, to the right, a cell and to the left a half-cell. The cell is 9' 10" broad 7' 10" deep and 6' 10" high with a grooved

doorway 2' 7" wide and 6' 9" high, and along its entire right wall a bench 2' 5" wide and 2' 10" high. The half cell is 9' 9" deep 4' 1" broad and 7' 8" high, with, along its entire back wall, a bench 2' 8" broad and 3' from the floor. The veranda is 22' broad and 5' 7" deep with a bench along its left wall.

Cave XX V.

About 150 feet further to the left, almost inaccessible, is Cave XXV. with a cell, a broken open veranda, and a seat recess to the left. In the rough back wall of the veranda is the cell 10' deep 7' 10" broad and 8' high with a doorway about 5' 2" broad and 6' 2" high. A doorway, 2' 9" wide and 7' 4" high, in its left wall, leads to an inner cell 7' 8" broad 4' deep and 7' 4" high with uneven and irregular walls as further work was stopped by a flaw in the rock.

Cave XXVI.

About forty feet below cave VI. is Cave XXVI. a plain excavation consisting of an open veranda. Passing round the east end of this hill, after a walk of fully a mile, or about four miles from Junnar, in another spur of the Suleman hill, is a group of caves in the face of the hill about 400 feet above the level of Junnar. The caves face south-south west and are usually said to be difficult of approach, as the precipice in front of them is almost perpendicular. The most easterly cave of the group is a small *chaitya* or chapel cave 22' 4" long and 8' 2" wide. The relic-shrine, 15' 4" from the door, is 9' 4" in height and 4' 10" in diameter. The walls are not straight nor the floor level. The side, aisles have not been begun and, except the upper part of the relic-shrine or daghoba, almost no part of the interior is quite finished. The height of the cave is 16' to the top of the architrave or triforium and 18' 2" to the centre of the roof. Outside, the facade is carved with the horseshoe or *chaitya* window ornaments, some enclosing a relic-shrine and others a lotus flower; while the rail ornament is largely interspersed in the usual way. The fronton round the window is also carved with a geometrical pattern. The general details of this cave seem to show that it is one of the earliest excavations at Junnar. Next to it, but higher up and almost inaccessible, are two cells, a well, and next a small dwelling or vihar with three cells two of them with stone beds. Some rough cutting on the back wall between the cell doors resembles a relic-shrine in low relief, but it is quite unfinished. Outside are two more cells and a chamber or chapel at the end of a veranda that runs along in front both of the vihar and the cells.

Trips.

Kukdi Vally.

From Junnar it is a pleasant trip sixteen miles west to Ghatghar, about two miles to the east of the Nana Pass. The road has lately been improved and is fit for bullock and pony carts. It winds up the Kukadner or Vale of the Kukdi, a broad flat valley whose bare sides rise gently to ranges of steep wildly scarped hills. At first, as in Junnar, the valley has Hatkeshvar and the Mangni hills to the north and Shivner and the Tulja hills to the south,

and between the two lines of hills rocky uplands and lower spurs, strewn with stones and white with bleached grass, are relieved by a few scattered trees, and nearer the centre of the valley, until the end of the cold weather, by hollows green with crops. On the left the Tulja hills are seen hid behind the lofty waving line of the Manekdho range. About six miles from Junnar the valley opens to the Nana Pass, Chavand, Shambhu, and part of the Jivdhan range showing on the left, and Hadsar, the Masherdi hills, and the worn towerlike crags of Anjanola on the right. Though the hill-tops change, the new hills differ little from the old, and, except that it is somewhat rougher, the valley remains much the same. The hill-sides are steep and bare, striped by level belts of rock standing like walls or dwarfed by banks of earth and stones washed from the upper slopes. The same rocky spurs and low plateaus fringe the valley and the general bareness is relieved by the same thin sprinkling of trees. The level parts of the valley yield crops during the rainy months, the main crop changing near Rajur, about eight miles west of Junnar, from millet to rice. In hollows near the river, till the end of the cold season, patches of bright green wheat, purple peas, or feathery blue-green gram are broken by the glistening thistle-like heads of kardai or safflower. The stream loiters in long shady reaches between banks whose hollows glow with rich ruddy grass. At Hirdi, about ten miles from Junnar, in the northern range, formerly hid by the Masherdi hills, appear the two-headed fort of Nimgiri, the long deeply scarped line of Devala, and the worn crags of Anjanola. In the south range, beyond the massive square block of Chavand, the lower castellated crag of Shambhu is dwarfed by the higher slopes of Karkumba. Behind Karkumba stands the steep shoulder locally known as Pahad, and beyond Pahad the lofty range which ends northwards in the fortified scarp of Jivdhan. From the middle of the plain, which separates Jivdhan from Anjanola, rise the bare slopes of a small hill and a little to the south a steep narrow point. The steep narrow point is the back of Nana's Thumb, and between it and the small hill to the north is the narrow cleft of the Nana Pass. About as far west as Hirdi the valley divides in two. A somewhat broken plain, about a mile broad, continues to stretch west about six miles to the head of the Nana Pass This is generally called the Kukadner, but the stream which drains it is only a branch of the true Kukdi. The main stream turns to the left close under Chavand, crosses to the south between Chavand and Shambhu, and then winds west aboutfour miles up a wild narrow valley ending in a glen shut in by high hills with woody terraces and green under-slopes. At the top of the glen, close under the western hills, in a thick *jambhul* and mango grove, on the right bank of the stream, is an old Hindu temple to Kukdeshvar, the god of the river. From the temple, across the west shoulder of Shambhu, a pleasant path leads along the north face of the Karkumba hills about five miles to Ghatghar. In the country to the west of Hirdi, in the broad or northern Kukadner, the valley is rougher than further east, the hill sides are much less bare, and the hollows and lower slopes and plateaus are in places richly wooded. In the two miles between Ghatghar and the Nana Pass the country is level and tame, redeemed to the north by the wild rounded crags of the Anjanola hill, and to the south by the great fortified block of Jivdhan, which is much like Shivner, except that the north end is squarer and blunter and that the upper hill is higher and larger.

Somewhat raised rocky ground seems to join the ends of the Anjanola spurs on the north and the Jivdhan spurs on the south. But there is said to be a break in the Anjanola spur and the drainage of the two miles beyond to the head of the Nana Pass winds north and

south and finally sets eastwards. In front is a line of low hillocks with grass and bushes and to the right the bare slope of the back of Nana's Thumb which does not rise more than 150 feet above the plain.

On the right of the low bank of hills to the north of Nana's Thumb is the pass called the Boranda Gate or *Borandache Dar*, which is fit only for men. The pass to the south of Nana's Thumb is called Guna and the pass to the north Nana. To the southeast the fine west scarp of Jivdhan ends south-west in a solitary rock pillar, about 200 feet high, known as the Monkey's Point or Vandrache look.

Nana Pass.

The ascent of the steep bare slope of Nana's Thumb from the east is easy but the sides are scarped crags. The Nana Pass is on the north side of the Thumb and the Guna Pass on the south. The distance from Ghatghar to the head of the Nana Pass is about two miles. A short distance before reaching the top of the pass the ground is covered with traces of houses which formed the old village, of Ghatghar. Among the stones that mark old foundations, a few yards to the west of the path, is a broken Hero Stone (2' 5" X 1') with four faces and three panels ten inches broad in each face. On the east face, in the lowest panel below, a dead man lies on the ground and above him a row of cattle shows that he met his death in a cattle raid. In the left of the panel, above, a figure, the corpse of the panel below, armed with sword and shield, fights two horsemen with spears. In the top panel is a central' *ling* and two side worshippers, the one on the left sitting cross-legged, the one on the right standing and waving a lamp with his right hand and ringing a bell with his left. Above an angel bears a garland. In the south face, in the lowest panel, is a dead man with three cows above him. In the middle panel in the left, the corpse of the panel below, armed with sword and shield and with a big top-knot, fights two horsemen on the right with spears. Above two figures worship a ling, the left sitting and the right standing. In the west face the lowest panel has a dead man with a flying regal bearing a garland. In the middle panel one man on the left with sword and shield fights two men on the right with spear and shield. Above are Shiv and Parvati. In the north in the lowest panel is a dead man and two angels bearing a garland In the middle panel on the right a man with sword and shield fights two men with spears and shields. In the top panel in the centre over a *ling* is an angel with side worshippers. About a hundred yards to the south of the Hero Stone, a stone belonging to a temple of Hemadpanti or pre-Musalman times, represents Mahalakshmi seated between two elephants.

The Guna Pass to the south of the Thumb is not now used, and though it is said to have been formerly practicable, there are no traces of any stair or other work without which it is impassable. It is a very narrow gorge with a deep drop on either side and a sheer wall of rock in front. Over the Guna Pass is a splendid stretch of the wild western front of the Sahyadris. Beyond a spur of Jivdhan that stands out to the south of the Guna gorge the deep cleft is the entrance to the Amboli Ghat and the high point or flat top behind is Dhak. Then the Sahyadris stretch to the west in great scarps that run down from Bhimashankar in sharp cliffs to lower slopes and plateaus deep in forest. To the west, between the Guna and Nana Pass, rises the back of Nana's Thumb whose sheer cliff is so

well known a land-mark from below. It rises steep and bare but of easy ascent about 150 feet with, a few steps beyond the crest, a sheer drop into the Konkan. The top commands a magnificent view of the great bend in the Sahyadris that stretches from the range that runs to the west near Kalsubai in Nasik to the Bhimashankar hills a distance of about sixty miles. The chief hill to the north is the great fort of Harishchandragad, with its regular wall-like bands of trap, one or two of them higher layers than appear in any of the neighbouring hills. To the south the chief peaks are Dhak and Bhimashankar. To the east between its two western guardians, Anjanola and Jivdhan, the broad level valley of the Kukdi stretches to the horizon. To the north-west, across the Konkan, stands out the Mahuli range with the great cleft and shattered pinnacles of Mahuli. To the south-west behind Shidgad, at the end of the Bhimashankar hills, are the level top of Matheran, the great comb like rock of Chanderi, and the cliffs and pinnacles of Bava Malang nearly hidden by the rounded top of Tavli. Near the isolated hill of Shidgad, at the point of the Bhimashankar hills, is the rough pass of Avapa whose difficulties and dangers Fryer, who was dragged up it in 1673, has so feelingly described.

At the top of the Nana Pass, on the right, is a platform (22' 9" x 15' 9") paved with old dressed stones and varying in height from 4' 5" on the west to 6' 7" on the east. In the south-west corner of the parapet is a great jar hewn out of the rock, about five feet high, with a heavy lid on one side of which is a hole through which apparently toll money was dropped. On the left, about ten feet above the path, nearly opposite the old toll-jar, a small cell now half full of earth is used as a temple of Ganpati, and about thirty paces to the south-west are three rock-cut cisterns in the open or pool style. The path, which varies in breadth from 16' 4" to 7, passes about 250 feet between two high banks of rock whose scarps seem to be partly artificial, though all traces of the chisel have worn off. About 250 feet from the toll platform, on each side of the path is a line of caves or rest-houses and water cisterns. Except two close to the path, the group of caves on the right has been so injured by the weather as to look little more than natural caverns. To the left, beyond a red modern figure of Hanuman the monkey god, over which is an old cistern, is a plain rough cave whose front wall and pillars have disappeared, whose floor has been broken and hollowed, and from much of whose sides and top the original surface has peeled. The cave was about 28' 7" square and 7' 10" high. The front of the cave may be traced by the remains of two square pilasters in the walls and by the square capital of one of the pillars which is still visible in the roof. The three sides of the cave were surrounded by a stone bench two feet broad and one foot seven inches high. Except in one or two places the bench has disappeared and the floor is rough and uneven almost like a natural cave. The whole face of the side walls was originally covered with writing in characters of about B.C. 100. The peeling of the outer surface of the wall has made many blanks and spoiled the meaning of a good deal of the inscription, still enough is left to place the general sense beyond doubt.

Inteription. B.C. 100.

The inscription may be translated:

| Salutation to Dhamma (Dharma); Salutation to Ind (Indra); and salutations to Samkamsana (Samkarshana) and Va'sudeva, to the moon and the sun, to the five and the wind, to the four gods of the quarters, Tama, Varuna, Kubera, and Va'sava- The great prinoe, king Vedisiri (Vedishri) |
|---|
| Description: At the Aga'dheya (Sk. Agnya'dheya) sacrifice, gave a gift of twelve cows |
| gave in gift to. learned Brahman visitors (20,000 ka'rsha'panas) |
| gift cows 1002. The Chhandomapavama'na sacrifice, gift cows 1001. Performed the Antarvasutrira'tra sacrifice, gave in gift 1001 cows. Performed the Para'katrira'tra |

| the sacrifice, gave in gift 1001 cows | Trayodasha (ra'tra) |
|--|------------------------|
| Tra'yodashara'tra with Varsha'ra'tra, gave i | n gift cows Dasharatra |
| gave in gift 1001 cows sacrifice, | gift gave gift. |

In the back a niche or recess, about nine inches deep, began about 1'8" from the east wall and continued to within 5' 7" of the vest wall. In this long recess there are traces of eight figures or statues about life-size. Almost nothing is left in the wall to show where the statues stood except the feet, and in several cases the feet are worn to a rounded knob. But near the top of the wall, above each, the name of the person represented is carved in large letters. The first figure is king Satavahana, whose feet and the end of a waistcloth falling between the feet, remain about 1'5" from the east wall. The next figures were a couple of statues of queen Nayanika and king Satakarni. Almost no trace of this couple is left, but a slight swelling which was once one or two pairs of feet 1' 6" and 2' 11" from the feet of king S'atakarni. The fourth figure, whose feet can be dimly traced about 1' 10" from number three was 'Prince Bhaya.' Two feet one inch to the right are a pair of feet, whose is not known, as the inscription is broken. The sixth, which is 2' 5" from the fifth, was the statue of Vir or Yar the champion and saviour of the Marathas. The seventh, of which the only trace is a rounded knob representing feet about 2' 4" from Yir, was prince Hakusri. The eighth which is 2' 5" further was prince Satavahana. About 18" beyond S'atavahana, the recess ends and the whole of the wall is covered with writing. To the left or south of the rest-cave is a cistern 5' 5" broad and about 7' long, half of it passing under the hill side. Close by is a second cistern 5' X 4' and a third 5' X 7', and a little further on are three more, 3' 4"x3', 3' 6"x2' 7", and 3' 4"x3'. Above the cisterns is a view-seat, 18'4" x 11'9", and a small seat 3' 6"x 2' 4" inside. On the right side of the path, opposite the inscription cave, an unfinished cave 24' 6" x 9' 4" and 7' high, has a recess about 4' 2" in the back wall. A few paces beyond an opening with mud and water is about 9'x 11' 10" and 5' 1' high. Further on, at the same level, are several more cuttings, but, from the force of the south-west monsoon, their front walls have fallen away and they now differ little from natural caverns. Down the hill face the path zigzags sharply between two great walls of rock. It is paved with irregular slippery stones with, at intervals, traces of old dressed stones or worn rock-cut steps. On both sides, every now and again, are small plain cisterns, one on the left with traces of an inscription and another on the right about half a mile from the main cave and nearly at the foot of the crag with an inscription. [See below p. 223.] For half a mile further the path continues to zigzag sharply down a very steep slope at the foot of the scarp till it reaches the under slopes which are thickly wooded. From the beginning of the woods, and still better, from the Shingaru or Foal about a mile further, is a splendid view of the great tower like overhanging crag of Nana's Thumb.

The following account of the Nana pass from the Konkan side is repeated from the Statistical Account of Thana. [Bombay Gazetteer, XIV. 286-291] Nanaghat or Nana's pass in Murbad about seventy miles north-east of Bombay and about forty miles east of Kalyan station on the Peninsula railway, is a frequented pass in the Sahyadri hills with interesting remains and inscriptions which date from before the Christian era. Though steep and hard to climb, the Nana pass is the natural outlet for the great commerce which, in early times, centred in Junnar about twenty miles to the south-east and in Paithan

about- a hundred miles to the east and in later times (A.D. 1490 - 1630) in Ahmadnagar about halfway between Paithan and Junnar. In 1675 Dr. Fryer, who had been, misguided by the Avapa pass on his way up, came back from Junnar by what he calls the 'Nanny Gaut,' and explains to mean 'the little hill, in respect of the other which mounted a prodigious height above it.' At the top of the pass Fryer was stopped by a drove of 300 oxen laden with salt. After an hour's standing in the sun he got the drivers below to wait, and then the path was easy 'being supplied at fit distances with charitable cisterns of good water, and, towards the bottom, adorned with beautiful woods.' [East India and Persia, 141.]

At the beginning of British rule (1818) the Nana pass was in fair order, with a paved way which was supposed to have been made by Nana Fadnavis (1764-1800). In 1819 it was among the passes which, in the Collector's opinion, deserved to be kept in repair. [Mr. Marriott to Government, 29th Sep. 1819, Revenue Diary 144 of 1819.] Though the opening, first of high roads (1830-1840) and afterwards of railways (1858-1865), has drawn to the Thal pass in the north, and to the Bor pass in the south, the bulk of the trade between the Deccan and the coast, a considerable passenger and grain and salt traffic still centres in the Nana" pass[Cocoanuts, rice, salt, sugar and sugar candy go to the Deccan, and myrobalans, chillies, cotton seed, cotton, vegetables, pepper, and wheat come to the Konkan, See above p. 144.] which, however, is not passable for carts.

At the foot of the pass, which is about twenty miles east of Murbad, is the village of Vaisagra, vaishya griha, the merchants' or husband-men's dwelling place, with a small river called the Kanikhera or the gold-bearer, whose source is said to be in three springs which rise in the hills on either side of the pass. A little to the as of Vaisagra is its suburb Pardhanpada or the minister's village. From here the ascent begins with a gentle rise, and passes up, through thick forest, about a mile and a half, to a tableland called Shingaru or the Foal, where, near two pools of water (one of them roughly built), travellers and loaded animals rest. At Shingaru a road branches to the left to Pulu Sonala. This, of which an account is given later on, was once the favourite route but is now seldom used. From Shingaru is a rise of about a mile and a half. Over the tableland hangs the great wall of the Sahyadris, from whose level top shoots forth the bare thumb-like pinnacle of rock locally known as Nanacha Angtha or Nana's Thumb. The west or Konkan face of the thumb is a sheer cliff but the east or Deccan face falls with a gradual slope. The valley to the left or south of the thumb is called Guna; the valley to the right or north is called Nana, the people say that Nana and Guna were two brothers, who were asked by a king of Junnar to make a road from the Konkan to his capital. At the brothers' request it was agreed that the pass which was first finished should be used and be called by the name of the brother who made it. Both began work on the Konkan side, each up one of the valleys that flank the thumb. Guna's path had. an easy slope, but, at the end of the year, it was little more than begun; Nana's was a steep rough track, but it was finished, and, as he had promised, the king was satisfied and called it by Nana's name. The Nana pass is the one ordinarily used, for the Guna pass, though at first easier than the Nana pass, is afterwards very steep and difficult.

The Nana track climbs a steep slope in zigzags of undressed stone which seem to have once been rock-cut steps, of which broken or worn traces remain. On either side of the path the hills rise thickly covered with trees, and, at intervals, seats and cisterns or reservoirs are cut in the rock. About a mile above Shingaru, on the left, near a *vavla* or Ulmus integrif olia tree, is a two-mouthed cistern much like the cistern marked No. 5 at the Kanheri caves. It is very deep, but is dry and choked with rubbish. In front of the recess is an inscription, which, in letters of the first or second century after Christ, records that the cistern was cut by a merchant named Damaghosh of Kamavan in the thirteenth year of Chaturparna S'atakarni son of Vasishthi. A little further to the left is a reservoir with clear limpid water, and near it a rest-seat cut in the rock with an inscription of one line, stating, in letters of about the first or second century after Christ, that the seat was cut by one Govindadas of Sopara. A little further on the right are several small cisterns without writing and of no special interest. Further on, a little below the crest of the pass, is a cistern filled with mud, and in the recess above it are traces of letters enough to show that there was an inscription. Beyond this, to the right, are other smaller cisterns.

The old road from the Konkan to the Shingaru plateau came from the south by the village of Pulu Sonala. This path is now little used except by persons going to Pulu Sonala. Along it are some rock-cut cisterns, and at the beginning of the ascent, at a place called Ganesh thal or Ganesh's Plateau, is a stone box of the same size as the jar at the crest of the Nana pass, but square instead of round. The fact that it also is called *jakaticha ranjan* or the toll-jar supports the theory that both were used for collecting money. Near the jar are some ruins probably of a rest or toll-house. A little further, to the south, is Pulu Sonala village with Brahmanical-looking caves in the hill slopes four miles to the east. The way to the caves is very difficult, and, except one large chamber, there is nothing of sufficient interest to repay the trouble of the climb. It is not easy to say to what sect the caves belonged. A sculptured image of the goddess Mahishamardini or the Buffaloslaying Devi, set as an ornament on a pillar in the large chamber, proves that the sculptors were neither Buddhists nor Vaishnavs. In a recess in the back of the chamber, near where, in other caves, the object of worship is generally placed, is a cellar much like a cistern. But this is not the proper place for a cistern, nor has it any water channel to feed it. Cellars like this were chiefly used as places of meditation by followers of the Yoga system, and it is probable that the ascetic for whom this cave was made belonged to the Yoga sect. There is no inscription in the cave, but the form of the pillars seems older than the eighth century.

Whatever be the origin of the story of the brothers Nana and Guna, it is curious to find the name Nanaguna in Ptolemy. Ptolemy mentions Nanaguna thrice, each time as the name of a river. In one passage the sources of the Naguna or Nanaguna, are said to be from mount Auindu, where the hill is cleft towards the Gaoris and the Binda.[Bertius' Ptolemy, 204. The Gaoris is probably the Vaitarna, so called from the town of Goreh in Vada, and the Binda the Bhayndar or Bassein creek.] The second passage runs 'About the Nanaguna are the Phyllitee and the Bitti,' [Bertius' Ptolemy, 204] and the third is The mouth of the Nanaguna river.' In Ptolemy's list of names" on the Konkan coast, ['Bertius'Ptolemy, 198,] the mouth of the Nanaguna river comes far south in Pirate-Ariake, that is in Ratnagiri. The source of the Nanaguna is also carried far east, half

across the continent to the Vindhya mountains. At the same time, not far from the, west coast, south of Nasik and east of Sopara, close to the actual position of the Nanaghat, the lines of the Nanaguna, the Binda or Bassein creek, and the Gaoris river or Vaitarna, are made to join. This, and the phrase 'Where the hill is cleft towards the Gaoris and Binda rivers,' suggest that Ptolemy may have been told that the great stream of trade, from the coast to the inland marts of Paithan and Tagar, flowed along three lines, which centered in Nanaguna where the hill was cleft. And that from this Ptolemy thought that Nanaguna was a river, the same river on which Paithan was built.

For 1500 years after Ptolemy no reference to the Nanaghat has been traced. In 1673 Fryer referred to it and to its cisterns. IN 1828 Colonel Sykes noticed its excavations and cisterns, and gave a rough copy of its inscriptions. In 1838 Prinsep tried to decipher Colonel Sykes' copy of the large inscription in the chamber. In 1854 Dr. Stevenson noticed the large inscription, and made observations on some words from it. In 1876 Pandit Bhagvanlal wrote a paper on ancient Nagari numeration from the numerals in the large inscription, and in another paper, in 1877, he translated the inscriptions above the figures in the recess in the back wall of the large chamber.

History.

Strongly placed in a rich country on the Nana pass route, with a good climate and facilities for trade, Junnar appears to be a very early settlement. The hundred and thirtyfive caves in the three hills which enclose it with their thirty-five inscriptions show that Junnar was a great Buddhist centre and had easy communication with Kalyan in Thana, apparently by the Nana pass, and with Broach in Gujarat. One of the inscriptions records a gift by a minister of the Paithan Kshatrapa Nahapana (A.D.10?) from which Professor Bhandarkar believes that Junnar may have been the capital of Nahapdna. [Bhandarkar's Early Deccan History, 22. Pandit Bhagvanlal (Jour. Bom. Brt Roy. As. Soc. XIII. 17) identities Junnar with the Tagar of the Egyptian geographer Ptolemy (A.D.150) and the Greek author of the Periplus (A.D. 247). But for reasons given above, Part II. p. 211, the identification does not seem likely.] Nothing is known of Junnar till the eleventh twelfth and thirteenth centuries to which period belong the Hemadpanti temples and wells whose remains are found in and near the city. [See above p. 148. To about this time belong the Jain additions in the Manmoda caves. See above p. 170.] About this time, as the style of the reservoirs on its top and the defaced rock-cut figures of Hanuman and Ganesh at the beginning of its rock-cut stairs on the Junnar face show, Shivner fort appears to have been held by the Yadavs of Devgiri or Daulatabad (1170-1318). [See above p. 189. Compare Briggs' Ferishta, II. 436.] In 1443 the leading Bahmani noble Malik-ul-Tujar secured Shivner fort and sent several detachments from Junnar into the Konkan. [Briggs' Ferishta, 11.436.] Junnar was also at this time the head-quarters of the Koli head captain or sarnaik, appointed by the Bahmanis to control the Kolis and other wild tribes of the Sahyadri Mavals. [Jour. Bom. Geo. Soc. I. 238.] About 1470 the Russian traveler Athanasius Nikitin came from Cheul to Junnar in twenty-four days by what appears to have been the Pimpri pass. [See below Navlakh Umbre.] The town stood on a stony island, no human hands built it; God made the town; a narrow road which it took a day to climb, broad enough for only one man at a time, led up the hill. At Junnar lived Asat

Khan a tributary of Malik Tuchar, that is Malik-ul-Tujar, the governor of Daulatabad. Asat Khan held seven of Malik-ul-Tujar's twenty-seven *tmas* that is *thanas* or posts. Nikitin wintered, that is passed the rains, at Junnar living there for two months. For four months day and night there was nothing but rain and dirt. [Major's India in XV. Century; Nikitin, 9. Nikitin's details of the state of the country and the people are given in Part II. pp. 218-219.] About 1485 Malik Ahmad, the founder of the Nizam Shahi dynasty (1490 -1636), was appointed manager of Nizam-ul-Mulk's new estates in the North Deccan and made-Junnar his head-quarters. The Maratha commandant of Shivner refused to give up the fort on the plea that the king was a boy and that changes of estates and forts should not be made till he came of age. Malik Ahmad attacked the fort, and after a long siege the garrison surrendered with their swords round their necks and dressed in shrouds. The capture of Shivner was of the greatest importance to Malik Ahmad as five years' revenue of Maharashtra was stored in the fort. The treasure enabled Ahmad to make rich presents to his officers and troops and helped him to secure all the places of strength in west and south-west Poona. [Briggs' Ferishta, 191, 196.] On his father's assassination in 1486 Malik Ahmad, who was besieging Rajpuri in Janjira, returned to Junnar, assumed the title of Nizam-ul-Mulk Bhairi, and set himself to improve the country. As Malik Ahmad had practically thrown off his allegiance, Mahmud Shah Bahmani II. (1482-1518) ordered Yusuf Adil Khan of Bijapur and the commandant of Chakan, about thirty miles southeast of Junnar, to attack him. Ahmad tried but failed to win to his side the Chakan commandant. As the Bahmani army was advancing against him, Ahmad left his family in Shivner and marched to meet the Bahmani force. He took Chakan, and from Chakan he marched against and defeated the Bahmani army. He returned to Junnar and busied himself with improving the; internal management of his territory. [Briggs' Ferishta, III. 195.] In 1493 Ahmad's sister, the wife of the commandant of Daulatabad, came to Junnar complaining of the murder of her husband and son. Malik besieged Daulatabad for two months without success and returned to Junnar. [Briggs' Ferishta, III. 200.] In 1494 Ahmad moved his capital from Junnar to his newly founded city of Ahmadnagar. [Briggs' Ferishta, III. 202.] In 1529 Burhan Nizam, the second Nizam Shahi king (1508-1553), sustained a defeat from the troops of Bahadur Shah of Gujarat (1525 - 1535) and retired to Junnar [Brings' Ferishta, II. 353.] In 1562 Husain Nizam Shah the third Ahmadnagar king (1552-1565), pursued by Ram Raja of Vijaynagar (1541 -1565) and Ali Adil Shah of Bijapur (1557 - 1580) retired to the Junnar hills and employed his troops to lay waste the districts of Junnar and Purandhar. [Lassen, IV. 214.] In 1564 on the accession of Murtaza Nizam Shah, the fourth Ahmadnagar king, his second brother Shah Kasim was placed in confinement at Shivner fort. [Briggs' Ferishta, III. 271.] In 1595 king Bahadur Nizam II. (1595 -1605) ennobled a Maratha named Maloji Bhonsla the grandfather of Shivaji, enriched him with the estates *or jagirs* of Poona and Supa and the charge of the forts and districts of Shivner and Chakan. [See Part II. p. 222.] In 1605, with the decline of Moghal power in the Deccan, Malik Ambar raised Murtaza Nizam II (1605-1631) to the throne, succeeded in recovering Junnar, and made it the head-quarters of a state, which included the greater part of the former possessions of Ahmadnagar. [Grant Duffs Marathas, 43.]. In one of her flights Shivaji's mother Jijibai came to Junnar on the 17th of May 1626 [Walks' South of India, I. 71.] and in 1627, in Shivner fort, Jijabai gave birth to Shivaji the founder of the Maratha empire. [Grant Duff's Marathas, 55.] In 1637 as Shahaji declined to enter Bijapur service and give up Junnar and other fortresses to the

Moghals, Mahmud of Bijapur (1626- 1656) helped the Moghal general Randulla Khan to overcome Shahaji who eventually agreed to enter Bijapur service and give up Junnar and other Poona forts. [Grant Duff's Marathas, 53; Elliot and Dowson, VII. 60.] About 1650 the Kolis of north-west Poona rose in rebellion. A Moghal army was sent into the hills, the hill forts were strengthened and garrisoned, the Kolis were hunted down and either made prisoners or slaughtered. The prisoners were taken to Junnar and their heads cut off and piled in a pyramid and a platform built over them which is still known as the Black Platform or Kala Chauthra. [Captain Mackintosh in Trans. Bom, Geo. Soc. I. 241-242.] In May 1657 Shivaji surprised and plundered Junnar in a night attack and carried off about £110,000 (3 lakhs of pagodas) in cash, 200 horses, valuable cloth, and other articles. [Grant Duffs Marathas, 73.] In 1663, after Shaiste Khan's surprise in Poona city, strong detachments were left at Chakan and Junnar and the main body of the Moghal army retired to Aurangabad. [Grant Duff's Marathas, 88,89.] In 1670 Fryer 1673. Shivaji made an unsuccessful attempt on Shivner. [Grant Duff's Marathas, 110.] In 1675 Shivaji made another unsuccessful attempt on Shivner his birthplace which was never destined to fall into his hands. [Grant Duff's Marathas, 119. Orme (Historical Fragments, 47), mentions that Shivaji sent two of his men to surprise Shivner. They got to the top but were discovered and the usual defence of rolling down stones piled from the top dispersed the assailants.] About, this time the services of the English physician and traveller Fryer were sought by the Moghal governor of Junnar or, as he calls it, Jeneah. Fryer started from Bombay on St. George's Day, the 23rd of April 1673, and reached Junnar on the 30th of April having passed by Kalyan Murbad and the steep Avapa pass. On the first of May 1673 Fryer waited on the governor of Junnar city in his castle, that is in the city fort or kot where the mamlatdar's office now is. It was large but made with a wall of raw brick serving to secure cattle as well as men. [Briggs' Ferishta, III. 195.] The governor's mansion was in the middle of the enclosure surrounded by a green quadrangle of trees and plants. In the chief hall or country was the governor with his great men on his right. The governor sat bolstered with embroidered cushions smoking a hubble-bubble, with a rich sword and buckler laid in front of him, and a page holding a bow and arrows in the Turkish fashion. The floor was spread with a soft bed with a fine sheet drawn over it. Fryer took off his shoes and was seated on the governor's left. Fryer had been asked to Junnar by the governor to see one of his wives who was sick. On the first lucky day after his arrival he was sent for to the ladies' quarters which were opposite to the governor's reception room, and in which lived four wives and more than 300 concubines. An old gentlewoman, with a tiffany veil, the government of the women's quarters, made many trips back and forward, and at last Fryer and his linguist were allowed in. The old lady clapped her hands and led him through a long dark passage with rooms on cither side. In an airy room was a bed which was completely surrounded by silk curtains. Fryer was told to put his hand through the curtains and feel the patient's pulse. Fryer found the hand sound and free from disease and told them the patient was well. They were pleased as they had put a healthy slave in the bed to try Fryer's skill. He then felt the wife's hand languid and weak and passed sentence. The ladies were much pleased with his skill and next day he was called in to bleed another of the wives. A curtain was drawn across the room and an arm held forth at a hole. But there were many of the women behind the curtain and as they pressed forward to have a peep at the doctor, the curtain gave way and the whole bevy fluttered like so many birds when a net is cast over them. Still none of

them sought to escape, but, feigning a shamefacedness, kept on looking through the wide lattice of their fingers. The lady Fryer had by the arm was a plump russet dame, and after the bleeding was over summoned the rest of her blood into her cheeks and ordered the curtain to be again hung up. She poured a golden shower of pagodas on the blood which Fryer made his man fish for. The ladies were clothed like men; in-doors they went in their hair, that is bareheaded, and abroad with veils. Like the Gypsy or Egyptian Cleopatra of old they exercised their ears and noses with weighty jewels. They seemed to lead a pleasant life. They had singing wenches to amuse them and were not unemployed, pealing mangoes and other fruits, making pickles, and doing fine samples of needle work. [East India and Persia, 132-133.] Fryer found Shivner or Jeneahgad the only fort left to the Moghals. There was as commandant of the fort, a Brahman, who had turned Musalman, who never went further than the foot of the hill and a governor of the town and district with a nominal force of 17,000 horse and 3000 foot, but an effective strength of not more than half that number. Most of the horse were Moghals and most of the foot were Gentoos. The governor lived in the fortified garden in which the mamlatdar's and other Government offices are now placed. There was no security in Junnar. The walls of the town were broken down though the gates remained. Trade had fled, though the city was well placed for coarse chintz and fine lawn, and had plenty of cotton ground and good wheat land but the fields were no sooner sown than they were burnt by the Marathas. The ploughmen and weavers had fled like the traders. Not one rich landholder was to be heard of within seven or eight days' journey. Provisions were the only things offered for sale and these the military forced the country people to bring in. Even the strong body of troops could not hold their own with the Marathas. The Moghals at Junnar seemed encamped rather than fortified. If Shivaji came in force they fled to the main army which was stationed three days off all Pedgaon in Ahmadnagar. [This is Pedgaon about forty miles south of Ahmadnagar which from 1672 to about 1710 was one of the principal stations of the Moghal army. Compare Ahmadnagar Statistical Account, Bombay Gazetteer, XVII. 700, 733.] Shivaji was very anxious to take Shivaner not only because of its strength and importance but because it was his birthplace. An attempt had lately been made and was nearly successful.

In May (1673) Fryer paid a visit to the invincible *Gur* of *Jeneah* or Junnar that is Shivner fort. The governor of the hill asked Fryer to visit him either on the hill top or in his garden below, which was the prescribed limit of his walk. Fryer said he would visit him on the hill top, and the governor's brother and an ingenuous Moghal with four palanquins were sent to escort him. They travelled two miles to the foot of the hill where was a garrison or fortified town, walled with strong watches, a troop of 500 horse and 500 camels, and huge stacks of hay and corn, for their droves of beasts were sheltered here at night. Shivaji had often distressed this town and put them to rout. The fort on the hill top was safe. No one could reach it except by seven winding gates which, were. very strong and able to clear one another as they rose, and the way lined with murderers and defended with good pieces of ordnance. The path was composed of slippery marble steps, cut out of the shining rock, as smooth as glass and reflecting the sun us brightly as glass. Riding was painful and keeping state in a palanquin required a strong back as the palanquin was carried bolt upright. After he had mounted near a hundred steps Fryer was received into the neck of the castle which was collared with a wall and furnished with a

gate of excellent work and strength filled with soldiers. From the neck of the castle an easy ascent led to a level circus where the infantry were trained. Here were conspicuous and finely built tombs of former kings and a mosque of polished marble where the garrison went on festivals. [It seems from this that the buildings in the south-west corner of the hill are Maratha, As no houses were able to stand the heat and the storms of the hill top, the eastern side of the hill was most inhabited as the central hill top sheltered it like a bank. They lived in little low huts, the governor in a pretty neat dwelling fenced with trees, the only trees on the hill top. The governor, who was a Brahman who had turned Musalman, was a lover of Franks and was most friendly to Fryer. He let him go all round the castle. Fryer was shown a place which Shivaji's men had lately tried to scale. The garrison had fled hearing that Shivaji was coming with a great army and only the governor and some women were left. Two of the men managed to reach the hill top, but a stone falling by chance kept back the rest and the governor and the women hurled the two men down the mountain. The hill top had seven years' provisions for a thousand families. It was full of granaries hewn out of stone, Fryer supposed at first for religion's sake as they were too delicately engraved for their present use. There were several cisterns filled with butter 400 years old, a black stinking and viscous balsam, which the gentiles prized as high as gold for aches and sore-eyes The water cisterns looked nastily green yellow and red. There was no ammunition but stones. The only pieces of ordnance were, at the two ends of the hill, a narrow bored brass jaker twenty-two feet long unshapen and of Gentoo mould, on a huge winding carriage. One of these guns about four months before fired at random into Shivaji's camp and killed a Raja about three miles off. No horse or elephant could climb to the hill top. The garrison was 1000 swordsmen and the chief gunner was a Portuguese half-caste. On the top of the hill in a wretched dwelling was a Dutch apostate enjoying a pair of wives the miserable tools who had brought him to this lamentable condition. He was despised and slighted by all, the usual fate of Christians who endure circumcision. The governor received Fryer in a chamber in his house which was hung with checkered green and red velvet. He was affable in manner and surrounded by a grave retinue. His name was Hagress Caun, or Hafiz Khan, originally a Brahman now a strict Musalman. He had been governor of Junnar city but oppressed the people being of covetous humour. He had a liberal pension and no expenses. Shivaji had lately tried to get him to betray his trust. Hagress Caun took mountains of gold and sent word to Bahadur Khan that Shivaji was going to attempt to take Shivner and the besieging force was caught in ambuscade and put to flight. At parting he gave Fryer a Kashmir bow-ring a charm against thunder. Fryer was well entertained by Nizam Beg, a relation of the governor's, poor but of a generous open temper but neither jealous nor lazy as most Moors are. He was a good Persian and Arabic scholar, and skilled in handicrafts which he had been taught by Europeans. He was a great lover of Franks or Europeans. He received Fryer in an airy banqueting room, amused him with dance- and with a jester or mimick, and with his own hand served him with slews and baked meats. [East India and Persia, 136.138.]

Fryer noticed on the top of Shivner hill many places cut in the rock then used as granaries, but in his opinion owing their origin to religion as they were too finely engraven for their present work. On his way down he saw many dens and caverns fondly believed to be carved and cut out of the rock by some divine power having no account of

their original. Fryer thought them indeed miraculous, the work of the pious zeal of former ages in undisturbed tranquility, thinking the greatest labour too little to express their love to a deity. The passages to the caves were difficult and they wore unprovided with human necessaries. [East India and Persia, 137.138.]

Fryer set apart a day to take notice of the adjacent rarities. The chief of these was a city called Dungeness, that is Ganesh Dongar, as old and as fine work as the Kanheri caves in Salsette, cut out of a mountain rock with a temple and other spacious halls, Both for water and for other refreshments it was in no way inferior to Kanheri and it was much more entire. Time had not dealt so cruelly with it; the lines of its ruined beauty might still be read though in old characters. Still it was desolate; a home for bats and' for wasps, to disturb which was dangerous, being overgrown and desperately revengeful. [East India and Persia, 134.135.]

Fryer notices that the Moghals are inclinable to the like credulity with the Gentoos. They point out a mount where undoubtedly Solomon gave audit to the two women who claimed the same child. It bears the name of Tocta Scheilmun that is Takhta Sulimani, Solomon's Throne. [East India and Persia, 139.]

Fryer went to see a ruined palace where Aurangzeb, the presed emperor, was hospitably received in his father's reign and lived a pretended *fakir*. [East India and Persia, 134.] He also mentions a garden left by a common strumpet with a noble tomb built in remembrance of her with a well belonging to a lovely spring which by aqueducts supplied the city with water.[East India and Persia, 134]

In 1684 Aurangzeb ordered thanas or posts to be placed in the country between Junnar and Sinhgad. In 1705 Aurangzeb halted 7½ months near Junnar before he marched towards Bijapur. [Grant Duff's Marathas, 178; Elliot and Dowson, VII. 379.] In 1716 Shahu demanded Shivner fort from the Moghals. [Grant Duff's Marathas, 197.] In 1762 Shivner was among the territory which Raghunathrav offered to the Moghal army which defeated Madhavrav, the fourth Peshwa (1761 - 1772) midway between Poona and Ahmadnagar. [Grant Duff's Marathas, 326.] In 1777 Balvantrav Bede, the brother-in-law of Nana Fadnavis, treacherously seized and killed five outlaws at Junnar. Balvantrav was haunted by the ghosts of the murdered men and, to regain his tranquillity, he built a temple near Junnar, and in it, as the object of worship, set five stones or panch lings representing the five Kolis he had executed. [Trans. Bom. Geog. Soc. I. 256.] In a revenue statement of about 1790 Juner is mentioned as the head of a sarkar of twentythree pargands with a total revenue of £146,434 (Rs. 14,64,338) and a sub-divisional revenue of £38,342 (Rs. 3,83,420). The limits of the Junnar sarkar apparently extended from Parner in Ahmadnagar to Sasvad in Poona. [Waring's Marathas, 240.] In 1793 Nana Fadnavis removed Bajirav and Chimnaji Appa, the two sons of Raghunathrav, from confinement at Kopargaon and Nasik to Junnar where, according to the local story, they were kept in close custody in the gadhi now used for the subdivision revenue and police offices. [Grant Duff's Marathas, 520. See above p. 147.] On Peshwa Madhavrav II.'s death in 1795 Parshuram Bhau went to Junnar and offered the Peshwaship to Bajirav. Parshuram Bhau held a cow by the tail and swore by the Godavari, and Bajirav was

satisfied and went with him to Poona. [See Part II. p. 272.] In June 1814 Mr. Elphinstone visited the 'town and rich valley of Joonere, with the scarped fort of Sheonaree over the town.' He went up the Ganesh Lena hill and saw the caves. [Colebrooke's Elphinstone, I. 281.] In November 1817 Bajirav Peshwa, flying from Manuli in Satara and Pandharpur in Sholapur, came to Junnar among whose hills he hoped Trimbakji Denglia would make him safe. At the end of December, finding no safety in Junnar, Bajirav fled south to Poona. [Grant Duff's Marathas, 655.] In the war which followed with the Peshwa a detachment under Major Eldridge came to Junnar on the 20th of May 1818. Both the mud forts of Junnar and Shivner were deserted and taken possession of by Lieutenant White of the 1st Auxiliary Battalion on the night of the 21st. Annabhai Rattikar, the commandant of Shivner, had fled to Hadsar fort, ten miles west of Junnar, where he was taken. [Pendhari and Maratha War Papers, 293-294.] A battalion of Bombay Native Infantry, two six-pounders, and a party of Captain Swanston's Horse were kept at Junnar. [Blacker's Maratha War, 315.] In 1827 Captain Clunes notices Junnar as a sub-divisional head-quarters with 3000 houses. [Itinerary, 16.] In 1828 Junnar had some fruit gardens, a good local market, and a population of not over 8000. [Mr. Pringle, 6th September 1828, in Lithographed Papers.] In 1841 Dr. Gibson, Conservator of Forests, believing that Shivner would be a hot weather health-resort, as it was then intended to have a central Sahyadri railway along the Malsej pass, with the help of four Chinese convicts planted a nursery of 200 exotic trees on the top of Shivner fort. [Poona Collector's 9220 of 21st December 1883. See Part II. p. 76. The olive still flourishes on the hill. See above p. 158.] In the 1845 disturbances of Raghoji Bhangria a detachment of Native Infantry was quartered at Junnar. [See Part II. p. 308.]

KADUS.

Kadus, on the Kamandalu a feeder of the Bhima, six miles north-west of Khed, is a large alienated village, with in 1872 a population of 3437 and in 1881 of 3571. A weekly market is held on Wednesday. To the west of the town on the left bank of the Kamandalu are small shrines of Mahadev, and near the shrines is a rude and massive temple of Bhairav called Siddheshvar. A fair attended by 1000 people is held at the temple on the tenth of the bright half of *Chaitra* or March-April.

KALAMB.

Kalamb, is a small village on the Poona-Jurmar rond about thirteen miles south-east of Khed and four miles north of Mam-bar. In 1814, according to Sir T. E. Colebrooke, Mr. Elphinstone noted caves in the hills round 'Kullum' many of them difficult of access and some with inscriptions. [Colebrooke's Elphinstone, I. 283.] He describes them as very handsome. A careful, search in the hills round Kalamb shows no trace of caves and the people of Kalamb know nothing of carves. Apparently a mistake has been made in extracting from Mr. Elphinstone's diary. It is difficult to say whether the caves visited by Mr. Elphinstone were the Manmoda group to the south-east of Junnar with forty-five caves, and nineteen inscriptions or the Shelarvadi group with six caves and one inscription.

KALAS.

Kalas, village, fifteen miles north-west of Indapur, with in 1881 a population of 1066, has a weekly market on Tuesday.,

KARDE.

Karde, a market town of 2074 people, stands in a plain among small hills, six miles south of Sirur. Karde is a large trade centre with about 190 merchants shopkeepers and moneylenders, The trade is chiefly in grain and other articles from the neighbouring villages or from the Bala Ghat in the north-east. The grain is sent to Poona, Junnar, and other market towns. Karde is the largest cattle and money centre in the Sirur sub-division and is much frequented by distant traders.

KARLE.

Ka'rle in Maval, six miles west of Khadkala, is a small village of 731 people with a station on the Peninsula railway and a public works bungalow. A weekly market is held on Friday. About two miles north of Karle, within the limits of Vehargaon village, is a noted group of Buddhist caves details of which are given below under Vehargaon.

In 1817 Karle was the scene of the capture of the Vaughan brothers who were hanged at Talegaon. [See below Talegaon Dabhade.] In 1827 Captain Clunes notices Karle with forty-two houses eight shops and a tank. [Itinerary, 10.]

KAVTE.

Kavte, a large village, twelve miles north-west of Sirur, with in 1881 a population of 2063, has a weekly market on Thursday.

KENDUR.

Kendur, on the Vel a feeder of the Bhima, about twenty miles south-west of Sirur, is a large market town, with in 1881 a population of 2989. The weekly market is held on Monday. The second Peshwa Bajirav Balaji (1721-1740) granted Kendur to his favourite mistress Mastani. [Details of Mastanbai, better known as Mastani, are given below under Pabal and Poona objects.] To the east of the town is the tomb of a Musalman saint Wali-Bawa where a small fair or *urus*, attended by 500 people, is held on the bright fourth of (*Chaitra* or March-April. The tomb enjoys a grant of land assessed at 4s. 6b. (Rs.2½).

KHADKALA.

Khadkala, on the right bank of the Indrayani thirty miles north-west of Poona, is the head-quarters of the Maval sub-division with a railway station and in 1881 a population of 816. Though a small village Khadkala, on account of its central position and the vaearness of the railway, has been made the head-quarters of a subdivision. Not far from

the railway station is a rest-house for native travellers. The 1880 railway returns showed 26,921 passengers and 739 tons of goods.

KHANDALA.

Description.

Khandala, north latitude 18° 46' and east longitude 76° 23', in a hollow about 1787 feet above the sea and 200 below the crest of the Sahyadri hills, forty-two miles north-west of Poona, is a station on the Peninsula railway, with in 1881 a population of 3069. The Khandala hollow highlands to the east south and west, slope north-west to the wild gorges of the Paraha and Ulhas rivers. To the north is the wild gorge of the Ulha's, to the east rows of low ridges that, running nearly north and south, part the Ulhas and the Indrayani, to the south the Bhoma-Umbari hills, and to the west a long flat spur that stretches north into the Ulhas ravine. Besides by the slopes that lead to the Bhoma-Umbari hills and to the western spur, the level of the Khandala hollow is broken by several knolls crowned by casuarinas, mangoes, bamboos, jambhuls, and other forest trees; it is seamed by the beds of torrents that cut their way north from the steep sides of the Bhoma range to the Ulhas ravine; and it is crossed from north to south by the Peninsula railway and from southeast to north-west by the Bombay-Poona high road. Houses are dotted over almost the whole of the Khandala hollow. European and Parsi dwellings hold most of the higher sites and the houses of the village are scattered over four hamlets, the old site and the Mhars' quarters on rising ground to the south of the railway, a group of tanners or Chambhars' huts some way to the easty and the New suburb now the main village lining the Bombay road near the centre of the hollow. Between the now village and the western spur is a large reservoir. North and east, beyond the wild gorge of the Ulhas, stretch waving grassy uplands, sprinkled with trees and with patches of brushwood and hill tillage. To the north, behind the uplands, rise the bare tops and slopes of the double-peaked Rajmachi, and. the more distant flat crest of Dhak, and, nearer to the east, the tamer dopes of the Gira or Tungarli hills. To the south-east the spurs that part the Ulhas and Indrayani rise towards the south and join the east end of the Bhoma-Umbari range which stretches about two miles from east to west at from 300 to 500 feet above Khandala, rising from the Vajiri pass in the centre, east into the Bhoma plateau and west into the bare bluff of Umbari. In the extreme south-west, behind Umbari, stands the sharp clear-cut cliff known as the Duke's Nose or *Nagphani* that is the Cobra's Hood. [The likeness in the outline of this rock to the Duke of Wellington's nose, the head lying back on the hill side, is best seen from near Lonavla. The overhanging point and side rocks which make the peak look like a cobra in act to strike are said to be best seen from near Khopivli or Campoli at the mouth of the Bor pass.] Except the two long spurs at the ends and the gentle rise to the Vajiri pass [The Vajiri pass takes its name from Vriji Dev, a red-smeared stone, which, on the Tuesdays of Ashadh or June-July is worshipped with cocoanuts and grain.] in the middle, the north face of the Bhoma-Umbari range, furrowed from crest to base by lines of deep cut stream beds, is in places thick with brushwood and small timber, and in the less steep and more open slopes is covered with grass which remains green or a rich brown after the other hill-sides are bleached and bare. To the west the spur that stretches from the foot of the Umbari cliff

north to the Ulhas ravine has its crest covered with buildings, dwellings with groves and rows of trees, two low flat-roofed blocks of barracks, and an English chapel. Especially in the soft mornings and evening side-lights Khandala commands beautiful views down the Parana and Ulhas ravines. From the grassy thinly-wooded crests the ravines fall down bare withered slopes or in sheer rugged cliffs, through gentler bush-clad banks or terraces and cool deep-wooded dells, into the sheer walls of rock that overhang the stream beds. Further on, as the gorges join and broaden into a valley, the stream winds slightly to the east round the broad base of Beran or Nath Pathar whose withered and rocky upper slopes end in a broad coppice-covered plateau, crowned near the west by two grassy knolls Skirting the base of Behran the deep wooded valley and lower slopes of the Ulhas, lightened by grassy glades, stretch north till in the distance the valley is crossed by a spur from Rajmachi hill. Except that their crests burn from yellow to white or red, the masses of foliage in the valley and lower slopes grow thinner, the brown grassy glades whiten and the streams slowly run dry, the larger ravines that are cleft down to the Konkan keep their main features unchanged throughout the fair season. On the other hard the uplands and shallow Deccan valleys which, during the rainy month are a one-toned green and in the dry season are bleached and yallow are full of colour in October. The deep grass, white only on steep rocky slopes, passes through bright or pale yellow and gentle or ruddy brown in the deeper soiled uplands, to the softest green in hollows and stream beds. In the valleys and lowlands the harvested rice plots, still moist and soft, are gay with small grasses and marsh flowers, other unreaped rice fields are masses of gold or white framed- by lines of brown-gray grass; while in the damper hollows, flooded from some tiny channel, are beds of late rice with gray nodding plumes and sharp quivering leaves of the brightest green.

Houses.

Of the 280 Khandala houses seventy-five are of the first class, forty-five of the second, and 160 of the third class. Of these, eleven are on the original village site, eleven in the Mhars' quarters, four in the Chambhars' hamlet, and the rest in the new suburb or scattered over the hollow.

Stock.

The stock returns show thirty-four bullocks, 120 cows, and forty buffaloes thirty-five of them female and five male, five horses, and fifty-eight sheep and goats. There are nine two-bullock ploughs, and six bullock carts and one riding cart. The fields, chiefly in the upper valleys to the east, yield rice, *nagli*, *vari*, and *sava*.

People.

Among the 565 people of the village proper, besides Maratha Brahmans and Kunbis are an Osval Shravak, three families of Lingayat Vanis, two Pardeshis one a Thakur the other a man of low caste, two Sonars, a Lohar, a Kasar, a Namdev Shimpi, a Nhavi, a Dhobi, two Pujari Kolis, and several families of Chambhars and Mhars. There are nine houses of Musalmans and one or two of Christians. Europeans and Parsis visit the village in the fair

season but none stay during the whole year. There are nine shops, three kept by Lingayat Vanis grocers and grain-dealers, one by a Marwar Vani a grain-dealer and moneylender, one by a tailor, two by goldsmiths, and two Liquor-shops one for European the other for native fermented liquor.

Trade.

During the fair season twenty or thirty bulloek-earts pass up and down the Bombay road daily, besides a few ponies and some droves of pack bullocks. The cartmen are Deccan Kunbis, Telis, and Musalmans, belonging chiefly to Poona and Ahmadnagar. They make three or four trips in the fair season, taking wheat, millet, oil, butter, onions, potatoes, raw sugar, cotton, *kulthi*, a dye called *tarvat*, pepper, and coriander seed; and bringing back chiefly salt from Panvel and Pen and to a less extent rice, date, and cocoanuts. The bullock packmen are chiefly Lamans from the eastern Deccan who take millet, wheat, and linseed and bring back salt which is the only article it pays them to carry. They make two trips a year. Ponies, belonging chiefly to Kunbis and Musalman Bagbans, take betelleaf or *pan* to Pen and Panvel and come back either empty or with loads of dried fish. These ponies make about two trips a month. Men are sometimes met carrying headloads of grain, chiefly rice and *nagli*. They are almost all Musalmans and Kunbis and come from Khopivli, Karjat, and other villages near the foot of the Sahyadris.

The railway station, in the south-east of the Khandala hollow, is surrounded on the east south and west by ridges, hills, and wooded knolls. Northwards the country is open rising in the distance into four chief hills, the nearer and lower spurs of the Gira or Tungarli hills in the east, the flat top of Dhak and the double peaks of Rajmachi to the north, and the wooded knoll-crowned plateau of Nath Pathar or Beran to the north-west. From the station the road runs north for about 150 yards to the Bombay road which stretches in a somewhat irregular line north-west to the crest of the Bor pass. Almost the whole of Khandala lies to the west of the station and the Bombay road, between the point where they join and the barrack ridge in the west. The only parts of the village that lie beyond these limits are the old village site and Mhars' quarters on rising ground to the south of the railway; to the east three dwellings, two on high ground almost a mile towards Lonavla and a third smaller and lower about half as far; and in a hollow, a few yards east along the Poona road, a cluster of Chambhars' huts. To the north of the point where the railway and the Bombay road meet are three small dwellings, and, a little to the west, on a bare plateau that stretches north to the edge of the Paraha ravine are the travellers' bungalow [The charges at the travellers' bungalow are 2s. (Re. 1) for one room for a day and, night and 1s. (8 as.) for one room for a'day. There is a messman and messenger. The messman's boarding charges are, besides wine, for a hot breakfast or luncheon 2s. (Rs. 1), for a cold breakfast or lauchuon 1s. 6d. (12 as.), and for dinner 3s. (Rs.1½).] and two small houses one used as an hotel. On the flat ground across the Paraha ravine to the north of the travellers' bungalow reached from the Poona road, across the little wooded ravine where the Dhobis wash, traces of a cleared carriage way and several house plinths seem to mark the site of the straw-built shed, built by Mr. Elphinstone, and often visited by him when Governor of Bombay (1819-1827). The house stands close to the edge of the rocky precipice skirting the Paraha ravine and commands a fine view west and south

to the Khandala plateau. [Colonel J. White, R. E. As early as 1811 Mr. Elphinstone had found out the charm of Khandala. In December 1811 (Colebrooke's Elphinstone, 1. 243) he wrote; The deep solitude of these valleys, apparently shut from all mankind, the silence disturbed only by the waving of branches, and the picturesque arrangement of crags and woods, recall delightful ideas and lead, to the fancy of happy hours spent in the enjoyment of the pleasures of the imagination. In September 1823 (Colebrooke's Elphinstone, II. 247) he wrote from Khandala: I have this morning ridden from Panvel on to my bungalow here; I am now in my room within three steps of the cliff. My window is immediately over it. It has been raining and thin clouds are still sailing up the chasm. Nak Puner is in sight over a cloud which cover the whole of the top of the Khandala hill. The cascade though not full is in great beauty and the sound of it is the only one heard.] About a hundred yards to the west of the travellers' bungalow is a pyramid-shaped stone monument to Mr. Graham the botanist. [The inscription runs:

To

John Graham, Esqr.,

Deputy Post Master General of Bombay,

An Active Originator, Warm Supporter, and Accomplished Member of the Agricultural Society of Western India.

Born at Westkirk on Esk 1805

Died at Kandalla 28th May 1839.

Erected by his numerous Friends throughout this Presidency

In commemoration of

The many Estimable qualities for which he was distinguished in all the relation

of Private Life and

The untiring exertion to oblige for which he was not less Conspiouous In the

Discharge of his Official Functions

And in token of their high sense

of his Disinterested Labours and Valuable Contribution

in the cause of Botanical Science.]

A few yards to the east of Grahamen's monument are two small tombs, one with a flat, the other with an upright stone.

[The writing on the flat stone runs:

Sacred

To the Memory

of

Wm. Byrne,

Late H. M's IV Lt. Dragoons, Who

Departed this life 28th January 1844,

Aged 59 years

Leaving a widow and a large family to lament their loss.

-0-

Weep not for me my children dear I am not dead but sleeping here.

The writing on the upright stone runs:

Sacred

to the

Memory of

Mary Jane

Infant Daughter of

Joseph and Harriet

Duncombe

Who departed this life

On the 3rd Dee. 1842

Aged 13 months and 25 days.

On high she now doth stand With Angel's harp and voice; And midst the saintly band She doth in Christ rejoice.

Further north where the ground falls into a lower plateau is a flat stone about two feet from the ground 4½ long and three broad with a raised central square block on which a pair of food- prints are carved. This stone marks the grave of a Hindu mason or Gavandi who died while the railway was being made.

To the west of the station, the Bombay road passes, with the post office on the right and a wooded knoll on the left, through new Khandala, a double line of low-tiled or iron-roofed houses with a stone-built school and some brick-built graindealers' and grocers' shops. Beyond this, after passing over the railway the lake lies on the left and on the right is a second hamlet with a Parsi rest-house, a blacksmith's and a butcher's shop, and some other houses chiefly of lower class Hindus. On a wooded knoll to the right stands a dwelling house, the property of Sir Jamsetji Jijabhai. To the left in front are the rest-quarters for troops and a rest-house for travellers and the Roman Catholic church. To the south at the mouth of the Vajiri pass are two small dwelling-houses, and in the west on

the barrack spur surrounded by casuarina trees is the Khandala hotel, further to the north a smaller house used as officers' quarters, the barrack outhouses, two long flat-roofed blocks of barracks, another set of outhouses, and a hospital, and a little further to the north the English chapel. At the end of the cliff with rows of tall casuarina trees is Bairamji's bungalow overhanging the Ulhas valley. [Near the west wall of the garden of Mr. Bairamji's house is a pillar about a foot square and four feet high covered with rich much worn carving. Among the figures are more than one small seated images. The pillar is said to have been brought from near the reversing station by a Mr. Adam who was employed in making the railway.]

Trips.

Half Day.

The old forts, rock-temples, and sacred groves in the country round make Khandala a convenient centre for a number of trips. These trips may be divided into two classes, halfday trips and whole-day trips. Of the half-day trips the simplest is to walk, ride, or drive two miles to Lonavla, walk about three quarters of a mile through its sacred grove, and come back up the steep grassy slope of Bhoma hill along its rolling plateau and back by the bush-clad Vajiri pass, a round of about six miles. The crest of the Vajiri pass, or still better, the top of the Umbari scarp to the west, commands an excellent view of the Thana and many of the West Poona hills. North, across the upper gorge of the Ulhas, rise the plateau and the double-fortified peaks of Rajmachi, and behind Rajmachi the distant masses of Jivdhan and Nana's Thumb, the watchers of the Nana pass. A little to the right of Rajmachi is the flat crest of Dhak, and behind, through a break in the range, the Kusur pass hills. Further east and closer at hand are the lower and tamer spurs of the Gira or Tungarli hills. The eastern view of the Indrayani valley is hidden by the ridge of the Bhoma hill. To the south, beyond the lands of Kuranda where the Indrayani takes its rise, is the bare western cliff of Sakarpathar and to the left the three nobs of Devha rising by rugged steps to the jagged head of Morgiri or Jambulni. Behind the bare western scarp of Sakarpathar rise the two isolated peaks of Koari fort and Malegar backol by wild lofty ranges, the Mulshi hills behind Koari and the Tel Baili hills behind Malegar. To the west, beyond the Sahyadri ravines, stretch the rice fields and grass uplands of the Patalganga valley with the tree-fringed lake of Khopivli in the foreground, and down the centre of the valley the long rows of trees that mark the line of the Bombay high road. Beyond the Sahyadri spurs, that form the southern limit of the Patalganga valley, rises the massive block of Manikgad on the borders of Pen and Karjat; behind Manikgad stretches the water of the Apts creek, and still further west, out of Bombay harbour, rises the roundtopped hill of Karanja. To the right of Khopivli, beyond the railway spur, stretches the flat top of Matheran, and the rugged crags of Bava Malang, and to the south the level crest of Prabal and the sharp point of False Funnel. Behind the south shoulder of False Funnel are the Persik hills and, further to the west, Salsette rising in three chief groups, Satkhindi behind Thana in the north, the Kanheri group in the centre, and the hills round Vehar in the south. Further to the north, rising close at hand from the Ulhas ravine, is the wooded knoll-crowned plateau of Beran or Pathar and a group of distant hills centering in the rugged mass of Mahuli. Across the Ulhas valley from Beran, Rajmachi Bhimashankar and the watchers of the Nana pass complete the view.

A second trip, which also is best made on foot, is, after passing two miles along the Lonavla road to the railway gate which leads to the Lonavla grove, to turn north across the Tungarli rice-lands and climb the Gira range that divides the villages of Tungarli and Kunch. From its central position Gira commands a finer view than almost any except the highest hills. To the north, bounded to the right by flat-topped ridges in the lands of Kuli, Pangloli, and Valvandi, stretches the wild wooded crest of the Sahyadris, gashed by the branch of the Kachal gorge, that, all but a narrow neck, cuts off Rajmachi from the Deccan. Behind Rajmachi are the distant out lines of Bhimashankar, Jivdhan, and Nana's Thumb. Over the narrow neck, to the east of Rajmachi, rises the massive level outline of Dhak, and, further to the right, range rises behind range till the view is closed by the Takir spur three miles from Khadkala. East and south-east lies the Indrayani valley, the level rice-lands broken. by wooded knolls, and bounded on the south by the wild clearcut outlines of Kuvara, Batrasi, Visapur, Lohogad, and the Sakarpathar plateau, behind which rise the lofty peaks of Morgiri or Jambhulni, Koari fort, and Saltar. To the west lies the hollow of Khandala bounded to the south by the Bhoma-Umbari range and endinig northward in the rugged gorge of the upper Ulhas stretching to the base of the wooded plateau of Beran or Nath Pathar, behind which rise Matheran and Prabal, and, in the distance, the Salsette hills and the Bombay harbour. After reaching the crest of the Gira hill the path runs east along the hill-top till it turns down a Steep gorge through a grove of old trees and huge climbers. It then crosses the rice-lands of Pangloli back to Lonavla and Khandala. The whole distance is about nine miles.

A third trip, which, like the two former trips, should be made on foot, is south through the Vajiri pass in the Bhoma-Umbari range down into the lands of Karvanda, up a steep zigzag grassy path, about three miles to the top of the Duke's Nose or the Nagphani that is Cobra's Hood, which commands a wide view like, and, in some respects, finer than the view from the Umbari bluff. Then back to within half a mile of Karvanda, turn to the west keeping the gaunt scarp of Nagphani to the right, and wind along a rugged uneven path through the rich forest that stretches to the foot of the Sahyadri slopes. Towards the north the wood grows thinner and the path, crossing the crests of spurs and winding along the edges of ravines, keeps fairly level till it reaches the grassy plateau on which stands the Khandala hotel. The whole distance is about nine miles.

A fourth half-day trip, which can be done only on foot and is best suited for a morning walk, is along the Bombay road to the first turn below Bairamji's bungalow. Then leaving the road, pass along a path that slopes down the west side of the ravine till it is crossed by the railway, keep to the railway for about 500 yards, and, leaving it when it enters a cutting, take to the left hand zigzag up the steep southern face of Beran or Nath Pathar.

From the crest of the hill, which is about 125 feet above the travellers' bungalow, pass west, through blanched grass and stunted coppice, about a mile and a half to the top of either of the knolls. [The chief trees are: *rundi karand* Cassia carandas, *gela* Randia dumetorum, *toran* Zizyphus rugosa, *jambhul* Eugenia jambolanum, *anjani* iron wood

Memecylon edule, kusar Jasminum latifolium, palur Ficus cordifolia, laigunda nana Lageratrsemia parviflora, bonda aulu Vanguiera edulis, rameta Lasiosaphon eriocephalua, asan Briedelia retuaa, and varas Heterophragma roxburghii.] Beyond the knolls, the hill top stretches in a second but shorter plateau, the part of the hill east of the knolls being known as Beran and the west as Nath Pathar. The view to the north is over the Ulhas valley with, in the distance, Dugad north of Matheran and Mahuli further to the right. To the north-east are the steep bare sides and flat plateau of Rajmachi with its two fortified peaks. Behind Rajmachi rises Dhak, and. beyond a deep bay in the line of the Sahyadris, Bhimashankar, Jivdhan, and Nana's Thumb. To the east and south-east, beyond the Ulhas gorge, are the peaks along the south of the Indrayani valley, the rounded Kuvara, the pointed Batrasi, the long flat of Visapur, and the short comb-back of Lohogad. Further to the south are the isolated peaks of Tung and Tikona and the jagged outline of Morgiri or Jambulni. To the south rise the pointed scarp of the Duke's Nose and in the distance the heights of Telbaili and Tamani. To the left is the heavy bluff of Manikgad and the range that centres in the pillarlike peak of Karnala or Funnel Hill. Futher to the left are the smaller pillar of False Funnel, and the long flat backs of Prabal and Matheran. The Beran plateau is badly off for water. About a month after the rains some families of Dhangars come bringing herds of cattle. There are then some pools at the eastern foot of the knolls. But these pools soon dry and there is seldom water later than January.

Whole Day

There are six chief whole-day trips, two east one to the Vehargaon or Karle and Bhaja caves and the other to the forts of Lohogad and Visapur; one south-east to the Bedsa caves; one south to Sakarpathar; one west to the Gambhirnath cave; and one north to Rajmachi fort.

For the Karle and Bhaja caves the only route in the beginning of the fair season is to ride or drive to the Karle travellers' bungalow about six miles; ride or walk to the Karle' caves and back to the bungalow about three miles; breakfast at the bungalow; and in the afternoon ride or walk to the Bhaja caves about three miles, and back six miles to Khandala. The whole distance is about twenty' miles. In the later part of the cold and during the hot season (March-June) the pleasantest route is to drive or ride by the old Poona road along the south limit of the Indrayani valley about eight miles to Bhaja; from Bhaja about two miles to the Karle bungalow, breakfast, and in the afternoon drive or ride two miles to the Karle caves and back by a cross country track that joins the main road near the village of Vakshai about two miles west of Karle. The whole distance is about eighteen miles. The caves are described under Vehargaon and Bhaja. The second whole-day trip to the east is, in the early part of the cold season, to ride or drive to Karle, from Karle to walk or rids about two miles to Bhaja, and from Bhaja to walk up a pass to the plateau from which Lohogad rises on the right and Visapur or the left. Visit Lohogad, and then going east, up the south face of Visapur, cross the hill and come down along the plateau above the Bhaja caves; then back to Karle and home by the main road to Khandala. In the later part of the fair season and during the climb weather the pleasantest way of seeing Lohogad and Visapur is to take the old Poona road, and leaving it at the

village of Avadhi, to climb the pass, cross the Lohogad plateau, climb Lohogad and examine the fort, descend to the plateau and passing on to Visapur cross the hill and return, meeting horses or a pony-cart at Bhaja. The whole distance is about eighteen miles. Details are given under Lohogad and Visapur.

The trip to the Bedsa caves is along the old Poona road and under Lohogad eleven miles to Pimpalgaon; climb the hill; go down the back a few hundred feet; and pass about one and a half miles to the caves, and return by the same route. The whole distance is about twenty-five miles. The caves are described under Bedsa.

The next trip is to the southern hills either through the Vajiri pass about four miles or round by Lonavla eight miles to the top of Sakarpathar. From Sakarpathar trips may be made in almost any direction. One of the best is about four miles south to the great Devgad wood.

The trip to the Brahmanic rock temple of Gambhirnath in the north face of Beran or Nath Pathar can be done only on foot. The way is the same as to the top of Beran hill, except instead of leaving the railway at the first cutting, keep along the line through six tunnels to about 500 feet below Khandala. Then, leaving the-railway on the right, climb a steep hillside about 150 feet above the railway with roughly cut steps near the top. From this the path leads for a short distance along a rough rocky ledge under an overhanging scarp with an outer row of very old Michelia champaca or *champha* trees. In front of the cave, which from its very sloping roof seems to be partly at least a natural cavern, is a rude frame supported on four pillars with a sloping roof roughly thatched with plantain leaves. [There was once a strong well built porch which was burnt clown.] Details of the cave are given under Jambrug in the Thana Statistical Account. [Bombay Gazetteer, XIV. 108-110.]

The path to Rajmachi fort in the north-east begins with a long bend to the east. It then winds along the rough crest of the Sahyadris, round the top of the deep Kachal valley, across a narrow neck or isthmus and round, up a steep pass, to the plateau from which rise the double fortified peaks of Manranjan on the west and the higher and steeper Shrivardhan on the east. The way back is across the same neck and along the same rough plateau and as the distance is about twenty-four miles, the whole of which must be done at a walk and most of it on foot, it is difficult to complete the trip much under twelve hours.

KHED.

Khed, north latitude 18° 50'and east longitude 73° 57', on the Bhima, twenty-five miles north of Poona, is a municipal town, the head-quarters of the Khed sub-division, with in 1872 a population of 6446 and in 1881 of 7015. The limits of the Khed township include the enormous tillage area of 13,060 acres or upwards of twenty square miles and about twenty-four hamlets. The town has good camping grounds especially in a mango grove about a mile to the east, and a rest-house for native travellers on the Bhima near the Ahmadnagar road. Besides the sub-divisional revenue and police offices Khed has a sub-

judge's court, a municipality, a dispensary, a Government school, a post office, the tomb of the Moghal general Dilavarkhan and three temples.

The municipality was established in 1863. In 1882-83 it had an income of £45 (Rs .450) chiefly from a house-tax and an expenditure of £80 (Rs. 800). The dispensary was opened in 1876. In 1882-83 it treated twenty in-patients and 4187 out-patients at a cost of £69 (Rs. 690). Dilavarkhan's tomb and mosque lie to the north of the town just outside the Delhi gate. They are surrounded by a wall enclosing a large plot of land most of which is under cultivation. The shrine is domed and built on a raised platform, the upper part of which is ornamented all round with a hanging wreath of sculptured flowers. The outside is quadrangular with a minaret flanking the dome at each corner. The four walls are adorned each with a double row of three blank arches, the centre arch in the lower and the two side arches in the upper row being minutely cusped. The shrine contains two tombs said to be of Dilavarkhan and his brother. [A third brother of Dilavarkhan is buried at Rahimatpur in Salara.] An inscription over the entrance shows that the tomb was built in 1613 (H. 1022) or early in the reign of Jahangir (1605-1627). The small mosque to the west of the tomb is a graceful specimen of Musalman carved-stone work. It is built on a raised platform and has a double row of three arches.

Temple:

The three temples are of Tukaidevi, Siddheshvar, and Vishnu, The temple of Tukaidevi at Tukaivadi lies a few yards to the right of the Poona-Nasik road. The temple, which is a rough looking building, is entered from the east through a small porch with a wall and pillars on either side. The porch opens into a hall or mandap with twelve pillars in four rows of three each and guarded by a high parapet wall surmounted by short single-stone pillars. The pillars are rude and massive; square about the middle, then eight-sided, then four-sided, again eight-sided, and then a series of rings surmounted by a square abacus which is tapped by a heavy headpiece with four projections. A flat stone roof rests on the pillars and recedes slightly beneath each set of four pillars. The external roof of the hall or nave is flat with a pot or *kalash* at each of the four corners and a small spire where the hall roof meets the shrine. The shrine has an- oval dome with a rude minaret at each of the four corners. In front of the temple is a one-stone lamp-pillar. The temple of Siddheshvar stands among trees on the Bhima about half a mile east of the town. The building includes a nave, a transept, and a shrine. It is entered from the north through a small porch whose roof rests on, two pillars. The shrine has a pyramidal and fluted or ribbed roof with a dome above and some snake ornaments adorning the ribs on the east and west. Over either transept is a smaller dome and a very small one over the nave. The projecting entablature of the temple is adorned underneath with pendent abaci ending in what looks like a ling and with an occasional figure. A Sanskrit inscription over the doorway shows that the temple was built by Trimbak Mahadev a Vani in 1725 (S. 1647). A fair is held on the *Mahashivratra* Day in February-March. To the north-east of the temple is a ruinous corridor rest-house of brick and mortar. Its eastern side consists of four cusped arches, and the north side of seven arches of which the middle only is cusped, the flat roof is ornamented with a pierced cornice. To the north of the temple is a small pond with flights of steps on the east north and south. On the west the corridor has

eight pillars and two pilasters in its frontage towards the pond. The north steps are broken by two small shrines facing similar shrines on the south. About a mile south of Khed on the Bhima is a temple to Vishnu built about 1830 by Chandiram an ascetic. A small fair is held at the temple on the dark eighth of *Shravan* or July-August.

In 1707 Khed was the scene of an action between Shahu and the party of his aunt Tarabai the widow of Raja Ram. Dhanaji, the general of Tarabai, did not support her minister the Pant Pratinidhi who fled to Satara. [Grant Duff's Marathas, 185.]

KEDGAON.

Kedgaon village in Bhimthadi about twelve miles north of supa, with in 1881 a population of 1572, has a station on the Peninsula railway 331 miles east of Poona. The 1880 railway returns showed 17,802 passengers and 489 tons of goods.

KIKVI.

Kikvi, a large village twelve miles south-west of Sasvad, with in 1881 a population of 1563, has a weekly market on Saturday.

KOARIGAD FORT.

Koarigad Fort, in the Mulshi petty division on the Poona-Kolaba frontier, rises on a flat topped detached hill commanding the Ambavni pass about twenty miles south of the Bor pass and about forty miles west of Poona. Stretching north and south with an extreme end pointing north, the fort is about a mile and a half in circumference. The ascent lies over a steep gorge, and the passage to the main entrance, which is completely covered with fallen masonry, leads on the north-east to a ruined gateway standing among blown-up walls. There is another on the west or weakest side of the fort. It is much more difficult than the main entrance, being steeper and up the rugged face of the rock. The defences include a wall banquette round the top, embrasured for guns at irregular intervals, and provided with embrasured towers at the corners. The top is flat and much of it is occupied by two large ponds supplied with abundant water and by a ruined temple of Koaridevi. [When the fort was deserted in 1818 the temple ornaments which were valued at about £50 (Rs. 500)' were brought to Bombay and made over to the Mumbadevi goddess.] Seven large cannon lie on the. hill, Lakshmi, the largest of them, being pointed to command the Ambavni pass.

History.

In 1486 Koari was taken by Malik Ahmad afterwards the first Ahmadnagar king. [Briggs' Ferishta, III. 191.] In the latter part of the seventeenth century, according to Koli tradition, a Koli Lumaji Bhokhar, the chief or *naik* of Pimpalgaon in the Mahad valley, was anxious to be *sarnaik* or head of the Kolis. To gain the favour of the Musalman government Lumaji brought word that there was a splendid horse in Koari fort. If he was given some money he would try and get it for the emperor. The money was advanced, the

Kolis of all the fifty-two valleys gathered, and surrounded the fort. At the end of a year, as the siege had made no progress, the Musalman governor threatened that unless they took the fort in a month a number of them would be put to a disgraceful death. Many of the Kolis fled, but Lumaji and some of his friends dressing as woodmen got into the fort and bribing one of the garrison by his help got a ladder fastened at the top. Lumaji and his friends came down from the fort and then with a band of their followers began to climb. When they reached the foot of the rock from whose top the ladder was hanging they found the ladder was seven or eight feet short. One got on the back of another and a third on him and so reached the ladder and seventy or eighty made their way to the fort. They overpowered the guard and secured the horse. They were carrying it off in triumph when one of the garrison shot it dead. The Musalman governor was so pleased with Lumaji's daring that he raised him to the rank of a noble and enriched him. In the Maratha war of 1818 Lieutenant-Colonel Prather advanced to Koari after taking Lohogad, Visapur, Rajmachi, and Tung and Tikona in Bhor territory. Its difficulty of access from the Karle valley showed considerable obstruction to the progress of the detachment; and one attempt to communicate with the road leading to it from Poona proved ineffectual. Another avenue being found. Lieutenant-Colonel Prather came before the place on 11th March with an advance party which drove in the enemy's outposts, [For the reconnaissance and investment of the fort Lieutenant Remon of the Engineers and a party under Captain Hose of His Majesty's 89th Regiment were detached from Scroti six miles south east of Koari on the morning of the 11th and they completely succeeded in their object of gallantly driving in the enemy who were advantageously posted on a height protected by a well directed fire from the fort guns. The besieging force with knapsacks on the shoulders of the men the after a inarch of six mites advanced to the charge up a steep hill to the very wall of the fort, the besieged keeping up a brisk fire of cannon and musketry, Bombay Courier, 28th March 1818.] leaving the remainder of the detach- ment to follow under Major Hall of His Majesty's 89th Foot which arrived on the following day with the exception of the heavy, train. Even this had been greatly lightened by leaving at Lohogad two eighteen-pounders and one of the thirteen-inch mortars. On the 13th a fire from the smaller mortar opened against the place and produced immediately an evident conflagration, while another battery was in a state of forwardness, opposite the north-eastern gateway, which was the chief access to the fort. On the morning of the 14th at daybreak, this likewise opened with good effect from one thirteen, one ten, and two eight-inch mortars, and about seven in the evening the enemy's magazine was seen to blow up which laid the chief gateway in ruins and burnt several of their houses. This induced the garrison to demand a suspension of hostilities, which was followed an hour afterwards by their surrender. About 700 men supposed to include some of those who had fled from Visapur and Lohogad and the commandant Janoba Bhau were taken prisoners. The loss of the detachment on this occasion was twelve men including one officer of Engineers slightly wounded, and that of the enemy about thirty-five most of whom were killed at the explosion. Treasure valued at about £10,000 (Es. 1 lakh) and some-grain were found in the fort. The fall of Koari was followed on the 17th by the surrender and occupation of the dependent fortress of Gangad about eight miles to the south. [Blacker's Maratha War, 247-248.]

KOREGAON.

Koregaon, village, twenty-five miles south-west of Sirur and about sixteen miles northeast of Poona, with in 1881 a population of 960, is famous for its successful defence on the 1st of January 1818 by 800 British troops against 30,000 Marathas. Towards the end of December, in the pursuit of Bajirav Peshwa which followed the battle of Kirkee (5th November 1817), news reached Colonel Burr, who was in charge of Poona, that Bajirav was passing south from Junnar and meant to attack Poona. Colonel Burr sent to Sirur for help. The second battalion of the first regiment Bombay Native Infantry of 500 rank and file under Captain Francis Staunton, accompanied by 300 irregular horse and two sixpounder guns manned by twenty four European Madras artillerymen under a Serjeant and a Lieutenant, left Sirur for Poona at eight in the evening of the 31st of December. After marching all night, a distance of the twenty-five miles, about ten in the morning, from the high ground behind Talegaon Dhamdhere, they saw across the Bhima the Peshwa's army of 25,000 Maratha horse. Captain Staunton marched on as if to ford the river, then turned, and took the village. Koregaon was surrounded by a mud wall of no great strength. [Grant Duff (Marathas, 656) describes the wall as full of large breaches on the river side and completely open on the east. This was its state at the end of the siege.] Captain Staunton secured a strong position for his guns and awaited the enemy's attack. As soon as the Maratha horse saw the British they recalled a body of 5000 infantry which was some distance ahead. When the infantry arrived three parties, each of 600 choice Arabs Gosavis and regular infantry, under cover of the river bank and supported by two guns. advanced to storm the village on three points. A continued shower of rockets set on fire many of the houses. The village was surrounded by horse and foot and the storming party broke down the wall in several places and forced their way in and secured a strong square enclosure from which they could not be dislodged. Though the village stood on the river bank the besiegers cut them off from water. Wearied with their night's march, under a burning sun, without food and without water, a handful of men held an open village against an army. Every foot was disputed, several streets and houses were taken and retaken, but more than half the European officers being wounded, the Arabs made themselves masters of a small temple, where three of the officers were lying wounded. Assistant Surgeon Wingate, one of their number, got up, and went out, but was immediately stabbed by Arabs and his body mangled. Lieutenant Swanston, who had two severe wounds, advised his remaining companion to suffer the Arabs to rifle them, which they did but without farther violence. In the meantime, a party of the battalion under Lieutenant Jones and Assistant Surgeon Wyllie, came to the rescue, retook the temple and carried their companions to a place of greater safety. Thirst drove the besieged nearly frantic and some of the gunners, all of whom fought with glorious bravery, thinking resistance hopeless, begged for a surrender. Captain Staunton would not hear of yielding. The gunners were still dissatisfied when their officer, Lieutenant Chisholm, happened to be killed and the enemy encouraged by his death rushed on one of the guns and took it. Lieut. Pattinson, Adjutant of the Second Battalion, a man six feet seven inches in height, of giant strength and heroic courage, was lying mortally wounded shot through the body. Hearing that the gun was taken he called on the Grenadiers once more to follow him, and, seizing a musket by the muzzle, rushed into the thick of the Arabs and felled them right and left till a second ball through the body disabled him. He was nobly seconded, the gun

was retaken, and dragged out of a heap of dead Arabs. Lieutenant Chisholm's body was found with the head cut off. This is the fate, cried Captain Staunton, of all who fall dead or alive into Maratha hands. The gunners took the lesson to heart and fought on with unflinching courage, and the defence did not slacken though only three officers, Captain Staunton, Lieutenant Jones, and Assistant Surgeon Wyllie, remained fit for duty. Towards evening their case seemed hopeless. As night fell the attack lightened and they got water. By nine the firing ceased and the Marathas left. Of the 834 defenders of Koregaon 275 were killed wounded and missing, of whom were twenty of the twenty-six gunners. [The details are: Second battalion First Regiment, 500 rank and file and five officers, Captain Staunton, Lieutenant Pattinson killed, Lieutenant Conellan wounded, Lieutenant Jones, Assistant Surgeon Wingate, killed. Artillery, twenty four men and two officers, Lieutenant Chisholm killed and Assistant Surgeon Wyllie, Auxiliary Horse 300 men and one officer, Lieutenant Swanston wounded. Grant Duff's Marathas, 658 footnote 2.] The Marathas lost between 500 and 600 killed and wounded. In reward for the defence of Koregaon which General Sir T. Hislop described as 'one of the most heroic and brilliant achievements ever recorded on the annals of the Army' the second battalion of the First Regiment was made Grenadiers as the first battalion had been made for the defence of Mangalur. The motto of the regiment became Mangalur and Koregaon. [Grant Duffs Marathas, 658 footnote 1,] Captain Staunton was appointed an honorary aide-decamp to the Governor General and presented by the Court of Directors with a sword ornamented with a suitable inscription and a sum of 500 guineas. On attaining the rank of Major in 1823 Captain Staunton was appointed a companion of the Most Honourable the Military Order of the Bath. [The sword was presented to Captain Staunton on the 1st of January 1820 by the Honourable Mountstuart Elphinstone. Five years later Lieutenant-Colonel Staunton, C. B., died on the 25th of June 1825 off the Cape of Good Hope. Historical Record, 2nd Grenadier Regiment, 19-34,39.] Mr. Elphinstone, who visited Koregaon two days after the fight (3rd January 1818), found every sign of violence and havoc. The houses were burnt and scattered with accoutrements and broken arms, and the streets were filled with the bodies of dead men and horses. The men were mostly Arabs and must have attacked most resolutely to have fallen in such numbers. Some wounded were treated with the same care as the British wounded. About fifty bodies within the village and half a dozen without, with the wounded and the dead, made not less than 300. About fifty bodies of sepoys and eleven Europeans, besides the officers, were found imperfectly buried. [Colebrooke's Elphinstone, II. 16-17.]

Obelisk.

At [Murray's Bombay Handbook, 304-305. Compare Jacquemont Voyage dans 1'Inde, III. 544.] the eminence near the river is a round stone tomb, where the artillerymen killed in the action were buried. At this point the river is crossed, and 300 yards to the left of the Poona road on the opposite bank is an obelisk 65 feet high of which 25 feet is pediment 12' 8" square. It stands on a stone platform 32' 4" square. The obelisk is of polished hard stone, and is enclosed with a stone wall six feet high on three sides, and an iron railing with a handsome iron gate and two lamps on the west side. The inscription on the north and south sides is in Marathi; and the inscription on the west side given below is in English. The inscription on the north and east sides gives the names of the English killed

and wounded, and of four natives attached to the artillery who were killed, from which it appears that of the eight officers engaged three were killed and two wounded, and of the twenty English artillerymen eleven were killed. The English inscription on the west side is:

Inscription.

This Column

by a Detachment commanded by Captain

Staunton of the Bombay Establishment

which was surrounded on the 1st of January 1818

by the Peshwa's whole army under his

personal command,

and withstood throughout the day a series of the most obstinate and sanguinary assaults of his best troops.

Captain Staunton,

under the most appalling circumstances,

persevered in his desperate resistance,

and, seconded by the unconquerable spirit of

his Detachment,

at length achieved the signal discomfiture of

the Enemy

and accomplished one of the proudest

triumphs

of the British Army in the East.

To perpetuate

the Memory of the brave troops

to whose heroic firmness and devotion it owes

the glory of that day,

the British Government.

has directed the names of their Corps and of

the killed and wounded

to be inscribed on this monument.

MDCCCXXII.

[Compare Chesson and Woodhall's Bombay Miscellany, VII. 46-48.]

KURKUMB.

Kurkumb, a small village of 911 people, on the Poona-Sholapur road, seven miles southeast of Patas station and about twenty miles north of Baramati, has two temples built in honour of Phirangadevi, one in the village and the other on a neighbouring hill. The larger temple of cut and polished stone is eight-sided with an audience hall or sabhamandap and verandas on both sides. The other temple on the hill is smaller and was built by Sambhaji Naik Nimbalkar, Deshmukh of Phaltan in 1759 (*Shak* 1681). It contains a Marathi inscription in Devnagari characters dated *Shak* 1681 (A.D. 1759) recording the name and the pedigree of the builder of the temple.

LOHOGAD AND VISAPUR.

About four miles south of the Karle cave hills and eight miles south-east of Khandala, in the range that forms the southern limit of the Indrayani valley, stand two fortified hills. Lohogad to the west short and comb-backed, and Visapur long and level to the east. From the village of Bhaja, about a mile south of the Karle railway station, a path leads up the face of a slightly wooded spur to the plateau from which rise the sheer cliffs of Lohogad on the right, and the tamer sides of Visapur on the left. From the top of the pass, between two hills, the track divides, one branch running west below the cliffs of Lohogad, the other east below the slopes of Visapur. This is the simplest path up either of the hills and is open all through the fair season. During the hot months (March-May) the pleasantest way of seeing Lohogad and Visapur from Khandala or Lonavla, is to start from the western village of Avadholi, climb Lohogad from the south, and passing to Visapur, scramble up the steep rugged gorge in its south face, and, crossing the hill, return by the north ravine along a smooth part-tilled plateau and down the steep hill-side that

overhangs the village of Bhaja. From Lonavla, keeping to the right under the southern range of hills, a rough cross country road follows the line of the first English highway between Poona and the Bor pass, [Though rough and in places entirely destroyed this road can still be clerly traced. It is locally known as the Peshwa's road, and may be on the line of a Maratha highway, but the remains of pavement and metalling seem English.] about four and a half miles south-east to Avadholi. The closer view of Lohogad shows a long rocky point, known as the Scorpion's Sting or Vichu-kanta, running north-west from the main body of the upper hill, and ending, over the Avadholi valley, in a bare black fortified crag. From Avadholi the path leads up a steep well wooded pass to a rolling plateau with scattered trees and patches of tillage from which, on the left, rises the black cliff of Lohogad fort. At first under the Scorpion's Sting, a cliff about 300 feet high, and then, under the bare scarp of the main hill whose walled crest, connected with the Scorpion's Sting by an arched gateway, rises about 150 feet higher, the path leads through about two miles of open woodland and hill tillage to the shady village of Lohvadi. To the left of Lohvadi are the sites of some large buildings, the dwellings of the local deshmukhs who had formerly large mansions and a well and garden. A filled up well may still be seen, in which according to the local story at a wedding the child bride and bridegroom fell were drowned and the place was deserted.

The Way Up,

Behind Lohvadi a path leads to the sole entrance to the fort, where, from among the trees, up the face of a steep spur, winds a flight of steps, partly built partly rock-cut, guarded by four arched gateways, each flanked by double bastions rising one above the other, the highest standing clear against the sky. [According to Lord Valentia (1803) the gateways take away from the strength of the place by offering a lodgment for a storming party. Travels, II. 171.] On the right, before reaching the lowest gateway, at the foot of a high rugged scarp, is a row of three caves, their mouths, except narrow doorways, closed by modern masonry walls. The first cave, known as the Salt Store, and measuring nineteen feet long by twenty-two broad and six and a half high, is plain without pillars or writing. Along the east wall are two stone benches each about six feet long by three broad and two high. Between the stone benches a door, cut in the rock, leads into a second cave, also plain and without pillars, about twenty-six feet by twenty and seven high and divided into two compartments by a modern stone and mortar wall. Adoor in the back wall of this cave opens on a second smaller chamber. A few yards further along the hill side is a third cave, with a masonry wall built nearly across the entrance and the inside partly filled with water. Beyond it is a large rock-cut water cistern about forty feet square and eighteen deep, the roof supported on two rough rock-cut pillars. In the bare face of the cliff, about thirty feet above this line of caves, reached by a broken flight of rock-cut steps, are two unfinished ceils, the lower five feet and a half by five and the upper six by five and four high. A hole leads through the floor of the upper into the lower cave, and, when finished, the two would probably have formed one chamber. Their position outside of the defences, and the contrast between the modern masonry entrance and partition walls and the rest of the work of the lower caves, and the rough stone steps and openings into the upper caves, bear out the people's belief that these caves were not granaries but Buddhist monk-dwellings or, as they say, Pandav-hewn houses. Their simplicity and rudeness, and

their close resemblance to some of the older Junnar caves point to an early date. A little above this line of caves rises, on the left, the western bastion of the first or Ganesh Gate. This was the first of the additions made by Nana Fadnavis about 1789. There is still a generally believed, and apparently true, story that the building had to be stopped because the foundation of the bastion would not hold. At last Nana was warned in a dream that the defences could never be completed until the favour of the god of the hill was won by burying alive a man and a woman. After much difficulty a Maratha of the Sabale clan agreed to offer his eldest son and his son's wife. A hole was dug and the two were buried alive and over them the foundations of the bastion were again laid and have ever since stood firm. In reward for this sacrifice the headship of the village of Lohvadi was taken from a Ghadshi family and given to the Sabale whose fourth in descent is the present police patil.

Fort Details.

According to the local story, of the four gateways, the Ganesh, Narayan, Hanumant, and Maha, the first second and fourth were built in the time of Nana Fadnavis and the third or Hanumant is older and was built by the Musalmans. The gateways of all are arched in Musalman style and strengthened by masonry bastions, the windings of the steps and the heights of the gateways being so planned that the approach is commanded by all the bastions. The gates are of teak strengthened with iron, the lowest or Ganesh gate being armed against elephants by long iron spikes. Here and there in the bastions of the Ganesh and other gates are a few small dismounted guns. [On one of the guns are out the letters and figures T. P. D. 4-1-17 and on another in Balbodh the words Ali Madat and the figures 3-3-12,] Inside of the Ganesh Gate on the right hand, about the level of the roof of the gateway, is a broken image of Ganpati. A little further, about halfway to the Narayan gate, in a niche on the right, is a small broken image of Gauri, Ganpati's mother, seated with crossed feet and upturned soles, her hands resting on her knees, four bracelets on each wrist, a bodice and a tiara or *mukut* on her head. To the right, about halfway between the Narayan and Hanumant gates, are two caves, the nearer fourteen feet by sixteen and nine high, used by the Marathas as a *nachni* store, and the further, about twenty-nine by thirty feet and twelve high, used as a rice store. They are plain, without pillars ornament or writing, and, except narrow doors, have their mouths closed by masonry. Their depth, three or four feet below the entrance, and the roughness of the tool-marks, support the local belief that they are the work of men, not of the Pandavs, and were cut by the Marathas as granaries. A few steps further, before passing through the Maruti or Hanumant gateway, a rough broken image of Maruti is cut in the cliff on the right. Just above this image is the Maruti or Hanumant gateway, the original gate of the fort, which, according to the local story, was built by Alamgir or Aurangzeb, but is probably at least as old as the Ahmadnagar kings (1489-1636). A few steps above the Maruti gate the staircase is spanned by an arch or kaman fitted with holes for bolts and bars. A little further the staircase turns sharp to the right in front of the Maha or Great gateway, a plain wooden door set in a Musalman arch, with some slight tracery above and a small image of Maruti on either side. Within the gateway is a ruined court and guard-room with one arch standing.

Facing the Maha gate, on a stone plinth about five feet high, stands a stone mausoleum, a square tower capped, as it seems from the out side, by a rough clumsy dome. This building, which is about fifteen feet square inside, has two slightly ornamented one tombs on the floor, and rises in a plain well-proportioned dome bout twenty-five feet high. It has no inscription. According to the local story it is a cenotaph in honour of Aurangzeb and one of his wives. Close to the mausoleum are the ruins of the small court-house or dhakti sadar, and in front, between the tomb and the clif edge, are the remains of the armoury or lohar-khana. Behind the dome, the hill rises into a bare knoll about 100 feet bigh, and to the right, under a cliff about thirty feet high, are the well-built plinths of four courtyards or chauks said to be the remains of the chief Government offices or mothi sadar. In the rocky brow behind are a set of four caves. The cave most to the south and west has its mouth, all but a hole about two feet square, choked with earth and fallen rocks. To the north-east, behind the ruins of the chief court-house, is a cistern about twelve feet deep cut into the face of the hill, the inner part supported by a roughly hewn rock pillar. A few steps to the right, with a porch about fifteen feet by eight, is the second cave partly filled with a mud and water, the entrance blocked by rocks and earth, and with a modern wall and door built across it. Inside, a modern stone and mortar wall divides the cave, leaving, to the left, a compartment about thirty feet by twenty. From this, a few yards to the east, two rock-cut doorways lead into two small chambers, one to the left the other facing the entrance doorway. The cave is plain throughout without pillars or ornament. A few yards further, opening from a small terrace strewn with stones and under an overhanging rock, is a third cave with a recess on the right and two small chambers on the left. This cave, which is known as the treasury, Khajandarki kothi or Jamdarkhana, measures about sixty feet long by forty-five broad and about eight high. It is plain without pillars or ornament and has, along the east wall, a stone bench about three feet high, five feet broad, and twenty-seven feet long.

Slight brick partitions divide the cave into compartments about fifteen feet square, and up the middle a row of treasure-coffers, about three feet square, have been sunk in the floor. A few yards further, under an overhanging rock, about six feet deep, is a fourth cave known as the Lakshmi Kothi. The original entrance seems to have been a central doorway with rock-posts and two side windows or openings, each about three feet high and eight long, cut halfway down to the floor of the cave. But, except a doorway measuring five feet by three, the front has been closed by a modern stone wall. Inside of the door is a rock-cut hall, fifty feet by thirty and seven high, with rock-cut side benches, but without pillars ornament or figures. Part of the hall, cut off by a brick partition, has been used as a store-room; sad in the roof, between the outer and inner doorways, a loop has been cut from which to hang the scales used in weighing grain and stores. In the back wall of this hall are four rough-hewn rock pillars, each about three feet square, placed so as to form a central doorway and two windows on either side, each window about eight feet long and four high, corresponding to the windows in the outer wall. A flight of three rough steps, with plain rock-cut side benches, each five feet long and three and a half wide, lead to the inner doorway. Within this doorway is a second hall, about fifty feet by nine and a half and seven high, in no way differing in style from the outer hall, except that at each end a door leads into a rock-cut chamber twelve feet by ten. Through the back wall of this second hall are reached a central and two side chambers, the central

chamber about 17' 6" by 13' 6" and each of the side chambers ten feet by fourteen. Within this central chamber is an inner shrine about eight feet by four with a small room to the left. On the back wall of the shrine are some markings and hollows which look as if a relic-shrine or other object of worship had been wrenched from the wall. The story is that this cave was the dwelling of Lomesh Rishi and that a passage once ran through the back wail of the shrine into the seer's private chamber. One of the Musalman kings is said to have spent sixty bottles of oil in lighting this passage in search of the seer, and, on failing to find him, ordered the mouth to be closed. Beyond Lakshmi's chamber are two small rough caves and a larger one, apparently about twenty feet by forty, now half filled with mud and water. This group of caves is by the people believed to be the work of the Pandavs, and though no trace of ornament figures or writing has been found, the style of the work, the position commanding a fine view south-east across the Pauna valley to the Mandvi Tikona and Morgiri or Jambhulni hills, and the neighbourhood of the old shrine of Bahiroba now the tomb of Shaikh Umar, favour the idea that it was once a Buddhist settlement. If they are Buddhist, the caves rank among the oldest class belonging to the second or first century before or after Christ. Passing over the high ground in which the caves are cut, the path leads to a walled enclosure, at the west end of which, covered by a rough thatched roof, is the tomb of Shaikh Umar Avalia an Arab saint. Shaikh Umar is said to have come from Mecca with six brothers one of whom was Bava Malang who gave his name to the hill near Kalyan in the Konkan and another Shaikh Salla of Poona. They are said to have come as missionaries before Musalman power was established in the Deccan. According to the guardian or *mujavar* of the tomb, whose family have held the post for seven generations, when Shaikh Umar came to Lohogad he found a Hindu ascetic on the hill-top whom he seized by the leg and tossed across to the Visapur plateau where his shrine is still worshipped as the *vandev* or forest-god. [It seems doubtful whether this so-called ascetic was a Gosavi and was not Bahiroba, The present vandev is said to be Bahiroba and has a Koli ministrant. At the top of the pass, on the way from Bhaja, is an old temple to some form of Devi with a broken dome in the cross-corner or Hemadpanti style. Closer under Lohogad on a rough plinth, are thirteen small stone horses about a foot high and a foot long, said to be the stable of Shaikh Umar. Here, in passing, Hindu women and children leave a small branch or tree-twig. It seems probable that Shaikh Umar's stud is a survival of the old Bahiroba horse-worship.] Once a year, on the December-January or *Paush* full-moon, a fair is held at Shaikh Umar's tomb, to which about 1200 pilgrims come, Hindus of all castes as well as Musalmans, mostly from the villages round as far as Poona. One of the visitors, a Hindu of the saddler or Jingar caste, lately (1880) presented the shrine with a handsome silk covering. In a corner of the enclosure are several votive clay horses. Behind, that is to the west of, the saint's tomb, the hill rises into a steep grassy knoll about 100 feet above the level of most of the hilltop. To the north of the central knoll, about 150 yards to the west of the saint's tomb, is a masonry pond about 140 yards round and with two flights of steps leading to the water. On the east wall of the north flight of steps a Marathi inscription dated S. 1711 (A. D. 1789) states that the maker of the pond was Balaji Janardan Bhanu (that is Nana Fadnavis), whose agent or representative was Dhondo Ballal Nitsure, and the mason who built it Bajichat. This pond does not now hold water. At the time of the capture of the hill the English are said to have run off the water in search of treasure and the escape opening has never been closed. The remains of a stone structure for working a leather bag and of

water-channels to the north show that the water of the pond was once used for gardening. To the south of the central knoll and to the west of the domed tomb is a ruined temple of Trimbakeshvar Mahadev, and close to the temple a rock-cut cistern and a well of pure water. To the north-west of the pond there seems to have been a garden where the artillery apparently was parked. A few guns lie about and stone balls are found in the grass. At the north-west corner of the hill-top a path passes through an arched gateway down a rough descent of 100 or 150 feet to the strip of rock known as the Scorpion's Sting. This rock, which is about 1500 yards long and from twenty to forty yards broad, has a rough flat top and steep sides strengthened by broad masonry parapets. The walled passage at the west end of the rock, according to Lord Valentia (1803), was the beginning of a flight of steps which were planned by one of the Satara chiefs but never completed. [Travels.II. 171.]

To the west of the plateau, below the Lohogad cliff, is a hamlet of about six Koli huts. They grow hill-grains, *nachni* and *vari*, own cattle, and make butter. They are Pujari or Pan Kolis acting as temple servants to Ganpati, Maruti, Bahiroba, Khandoba, and Vithoba. The Maratha Kunbis eat and drink with them, but they do not intermarry. Their surnames are Ikare, Dhanvale, Dakole, and Shilke.

History.

Lohogad is one of the strongest and most famous of Deccan forts and is probably a settlement of very great age. Its position, commanding the high road to the Bor pass, must have always made it important, [Till quite lately the high road to the Bor Pass kept close to the southern range of hills just below Lohogad.] and its large series of caves, though not yet properly examined, would seem to show that it was a Buddhist resort at least as early as Bhaja, Karle, and Bedsa (B.C. 200 - A.D. 200). On these grounds, and from its resemblance in name and position, it seems possible that Lohogad is Ptolemy's (A.D. 150) Olochoera, one of the chief places inland from the South Konkan or Pirate Coast. In modern times it is mentioned as one of the Bahmani forts taken by Malik Ahmad when (1489) he established himself as an independent ruler. [Grant Duff's Marathas, 33.] In 1564 Burhan Nizam Shah II. afterwards the seventh Ahmadnagar king (1590-1594) was confined here during his brother's reign. [Briggs' Ferishta, III. 271, 282.] On the fall of the Ahmadnagar' dynasty in 1637, Lohogad passed to the Bijapur kings, but was soon after (1648) wrested from them by Shivaji. In 1665, after the successes of Jaising and Dilawar Khan, Shivaji was forced to cede Lohogad to Aurangzeb. Only five years later (1670), in the successful operations that followed Tanaji Malusre's capture of Sinhgad, Lohogad was surprised by the Marathas, and afterwards made a sub-divisional headquarters and treasury. [The late Mr. G. H. Johns, C.S.] About 1704 Lohogad was taken by the Marathas, [Scott's Deccan, II. 56; Waring's Marathas, 125.] in 1713 it was taken by Angria, [Grant Duff's Marathas, 193.] and in 1720 it was given to Balaji Vishvanath. [Grant Duff's Marathas, 202.] About 1770 the fort was taken in the interests of Nana Fadnavis by a Koli named Javji Bomble. This man who was a famous outlaw had some capital rocket-men and advancing one of them to a favourable position pointed out to him the direction he was to fire. One of the rockets fell among some powder close to the door of the magazine and caused such an explosion that the garrison were forced to surrender.

[Transactions Bombay Geographical Society I. 253.] Towards the close of the eighteenth century Nana Fadnavis, when prime minister to Bajirao II. (1796-1800), placed Dhondopant, a dependant of his own, in command of Lohogad and sent all his treasure to the fort. After Nana's death (1800) his widow (12th November 1802)[Transactions Bombay Geographical Society, XIX. 84,] took refuge in Lohogad, and Dhondopant refused to hand over the fort to the Peshwa unless Nana's adherents received certain offices. Dhondopant remained in command till 1803 when the Peshwa, under General Wellesley's mediation, agreed to allow Dhondo to keep the fort on promise of acting as a faithful subject. Shortly after, from a fort near the Krishna, a garrison of Dhondopant's fired on the Peshwa and would not allow him to pass to a temple. In punishment for this outrage General Wellesley threatened to storm Lohogad; and on promise of personal safety and of a yearly grant of £120 (Rs. 1200) to Nana's widow whom General Wellesley described as 'very fair and very handsome Well deserving to be the object of a treaty,' Dhondopant retired to Thana and the widow to Panvel. When the fort surrendered to the British it held a prodigious quantity of ammunition of all kinds. It was at once restored to the Peshwa and in 1803 (October) when visited by Lord Valentia, was strongly garrisoned, but poorly supplied with stores. [Valentia's Travels, II.166-171. Dhondopant's garrison varied according to circumstances from one to three thousand men. Ditto, 171.] Some months after the outbreak of the final war with the Peshwa (4th March 1818) a strong force under Colonel Prother was sent against Lohogad. On the capture of Visapur the garrison left Lohogad and on the next day it was taken without resistance. [Blacker's Maratha War, 247.] Till as late as 1845 the fort was garrisoned by a commandant and a few troops. [Insp. Report of Forts, Poona Division, 1845] The guard was afterwards removed but, probably because the fort could at any time be commanded from Visapur, the four gateways and other fortifications were left unharmed. In 1862, it was reported as a strong fort, the walls and gates in slight disrepair, with a sufficient supply of water, and able to hold about 500 men. [Government Lists of Civil Forts, 1862.1

VISAPUR.

Rising from the same plateau as Lohogad, about half a mile to the north, the rocky scarp of VISAPUR is crowned by a smooth bare hill-top, considerably larger than Lohogad, and, at its highest point, 3550 feet above the sea. Near the middle of its length two ravines, one running down the north, the other down the south face, narrowing its centre, hollow the hill into an hour-glass. Each half of the hill rises into a gently rounded knoll which, though showing no trace of fortifications, is dignified with the name of Bala Killa or upper fort Round the edge of the hill-top runs a wall, high and strengthened by towers along the west face. In other parts, except where the rock is not sheer and the crest has been scarped by a masonary lining or pavement, it is little more than a stone and mud breast-work. In other parts, according to the lie of the ground, the defences vary from strong walls backed by masonry platforms where the slope was naturally easy, to a mere parapet of dry stone where the plateau ends in a precipice.

From Lohvadi, at the foot of Lohogad fort, the Visapur path passes north winding among plinths of cut-stone, which attest the importance of the old *peta* or cantonment attached to

Lohogad fort, past where Shaikh Umar dismounted, a spot marked by an earthen platform and a row of small votive clay horses, and past a hole in the east point of Lohogad cliff, made by the saint when he hurled his spear against the rock in defiance of the Hindu ascetic whom he was about to oust from the plateau. The Visapur path leads over a bare rocky partly tilled plateau across the crest of the ridge which connects Lohogad and Visapur. Beyond the shoulder, the path, for about a mile and a half, runs under the sheer scarp of Visapur fort. It then turns to the left up a deep gorge, the sides crested by massive masonry bastions, along a steep rough track strewn with large boulders and broken masonry, the ruins of the Deccan gateway, destroyed when the English dismantled the fort. At the head of the gorge, hewn in the rock, is a large reservoir said to be the work of the Pandavs, built in with modern stone-work and the interior plain. The hill-top, with its two conical knolls about two hundred feet high, [By aneroid the height of the Deccan gate is 3350, of the eastern bastion 3430, and of the central height 3550 feet above the sea.] is smooth and thickly covered with grass, but, except a few old Ficus glomerata or *umbar* trees in a hollow near the centre of the north face, it is bare of trees.

Besides the wall round the hill-top there are three chief works, massive masonry bastions that in both ravines [The Patan gorge was not so strongly fortified as the other gorge. There were some fortifications but all were blown down and the ascent from Patan is for a considerable distance over debris.] flank the ruined central gateway, a strong masonry tower at the north-east corner, and a great outstanding masonry-lined crag that guards the hill to the northwest. The remains on the hill are, in the western half, two roofless buildings surrounded by outer or veranda walls said to have once been Government offices, and in the east half, near the southern edge of the hill, a large three-cornered stone-built pond, and close to it a rock-cut cistern. Near the north wall is an iron gun ten feet long and of four-inch bore, marked in relief with the Tudor Rose and Crown flanked by the letters E. R. This is probably a gun of Queen Elizabeth's reign robbed from an English ship and presented to the Peshwa by Angria or some other Maratha pirate. [Government Lists of Civil Forts, 1862, state that most of the guns had the letters E and R carved on their trunnions. These letters have been noticed on this one gun only. Mr. J. McL. Campbell, C, S.] Like several other guns on the fort it has been disabled by breaking off its trunnions. Near the middle of the hill-top, between the two gorges, in a small grove of old *umbar* Ficus glomerata trees, are the ruins of a large stone-built house known as the Peshwa's palace. Close to it are the remains of an old Mahadev shrine.

The descent, through the north or Patan gate, is for two or three hundred yards somewhat steep and rugged with fragments of the ruined gateway. Lower down, the path passes under the north-west cliff, and, beyond the cliff, stretches for about a mile across a bare open plateau. Looking back from this plateau, the vast natural defences of the two hills stretch in a long waving line. Beginning with a bold bluff near the north-east corner of the hill the line recedes to form the northern or Patan gorge, then sweeps forward to the massive outstanding north-west crag, and again slightly receding stretches along the strongly fortified western face. Further west, with only a very short break, another line of fortifications crowns the north face of Lohogad, and, with a slight drop, stretches westward along the flat crest of the Scorpion's Sting. From the western brow of the

plateau, which commands this view, down the Bhaja hill-side a smooth steep path winds quickly to the plain.

History.

Visapur fort is said to have been built by the first Peshwa Balaji Vishvanath (1714-1720). In 1818, when reducing the Peshwa's forts, the fame of Lohogad as a place of strength caused the English to make special preparations for its attack. A detachment of 380 Europeans and 800 Natives, with a battering train, summoned from the Konkan, were joined by artillery from Chakan, and the second battalion Sixth Native Infantry and a detail of the second battalion of the First. The whole force was placed under the command of Colonel prother. [The Hon. M. Elphinstone to Gov. Gen. 7th March 1818. According to Blacker (Maratha War, 247) Col. Prother's force consisted of seven mortars and four heavy guns, 370 men of H. M.'s 89th Foot; the first battalion of the Fifth and first Battalion of the Ninth Regiments of Native Infantry; detachments of the second battalions of the Sixth and First Regiments of Native Infantry; and two companies of the Auxiliary Brigade.] On the 4th of March Visapur was attacked, and on the same day was occupied without resistance. [Blacker's Maratha War, 247.] Both the north or Konkan and the south or Deccan gateways were blown up, and except a few Dhangars' huts the hill has since been deserted. [Lists of Civil Forts, 1862.]

LONAVLA.

Lona'vla, about forty miles north-west of Poona, is a municipal town in Maval with a railway station and a population in 1881 of 3334. Lonavla lies at the top of the Bor pass and is the chief up-country centre of the south-east branch of the Peninsula railway corresponding to Igatpuri on the north-east branch. Besides the municipality and the railway station Lonavla has a post office, locomotive works, Protestant and Roman Catholic chapels, a railway school, a masonic, lodge, and a co-operative store. The 1883 railway returns showed 74,688 passengers and 1547 tons of goods. The municipality was established in 1877 and had in 1883 an income of £100 (Its. 1000) and an expenditure of £85 (Rs. 850). A railway reservoir, about two miles to the south of Lonavla, affords a fair supply of water to the town. Close to the south of the town is a large wood of fine trees hung in many parts with large thick-stemmed creepers. Along the south and west fringes of the wood are many favourite camping grounds during April and May. The wood, which covers about fifty six acres, is interesting as preserving a trace of the forest with which the West Poona valleys were probably once covered. This section of the early forest seems to have been protected out of fear for Mahadev whose shrine lies in the heart of the wood. Lonavla wood is famous for picnics and as a camping ground for visitors during the hot season (March-May). About four miles south of Lonavla is Sakar Pathar a wide waving hill-top in many ways particularly fitted for a health resort. [Details are given below under Sakar Pathar]

LONI.

Loni in Haveli, also called Loni Kalbhar, about ten miles south-east of Poona, with in 1881 a population of 2512, has a railway station and a Collector's bungalow. The station returns for 1980 show 12,621 passengers and 339 tons of goods. About two miles south of the village, in a spot called Ramachi Jaga or Ram Dara, is the tomb of one Satu Ramoshi who is said to have died about a hundred years ago. [Mr. H. E. Winter, C.S.] In 1827 Captain Clunes notices Loni as a usual halting place with 200 houses, five shops, a watercourse, and wells. [Itinerary, 27.]

LONI KAND.

Loni Kand, [The village is called Loni Kand to distinguish it from Loni on the Peninsula railway also called Loni Kalbhar in the same sub-division.] on the Poona-Ahmadnagar road about ten miles north-east of Poona, is a small village of 909 people with a travellers' bungalow.

In [Dr. Coats in Transactions Bombay Literary Society, III. 183-280. Dr. Costs papar gives a very interesting account of an old Deccan village and describes in detail a. village community, its institutions, and resources.] 1820 the township of Loni was described as having lands embracing a circumference of nearly nine miles comprising 3669 acres or about 5\% square miles. Of these 1955 acres were arable and the rest common used as pasturage. The town had 568 people in 107 houses. The town was situated on a dry slope overlooking its garden and arable lands. From a distance it looked like a mass of crumbling clay walls broken by a few stunted trees, and here and there a building like a barn or stable covered with red tiles. The whole was surrounded by a mud wall five furlongs round, ten to twelve feet high and four or five feet thick at the base. The wall had two rude gates, ten to twelve feet high and as many broad, made of two pieces of thick teak planks joined by cross beams lot into an eye cut in the frame above and resting on a hollowed stone below which served as a hinge. Within, the town was comfortless miserable and filthy. What seemed crumbling clay walls were the houses of the great body of the people built of sun-dried bricks of white chalky earth with terraced brick tops. Some were ruined and some had pieces of straw thatch thrown up against them to shelter poor people and cattle. The town had 107 inhabited dwellings and five public buildings, the *chavdi* or village office, three Hindu temples of Bhairay, Hanuman and Mahadev also used as rest-houses by travellers, and a ruined Musalman place of worship. The houses were built out of order as though for defence and had a general air of gloom and unsociableness. Narrow, dirty, and crooked lanes wound amongst them. The chavdi or office was thirty feet square with square gable ends and a tiled roof resting on a treble row of square wooden posts. It was used by travellers and Government messengers, and a corner of it was occupied by the Koli water-carrier. The temple of Bhairav was a tiled building open in front and poorly built. It contained images of Bhairav and his wife Jogeshvari and two or three pointed stones. All these were so covered with oil and redlead as to leave no trace of features. The image of Bhairav was in local repute for curing snake-bites and many people and cattle were said to have recovered. The god did not allow the *nim* tree, which is used against snake-bite, to grow within the village walls, as he himself took care of all snake-bitten patients. The building cost £12 10s. (Rs. 125). The temple of Hanuman twenty-six feet square had a flat roof terraced with white earth.

It had an open front and rested on rows of wooden posts. The image was placed against the back of the wall in a little niche facing the front. It was a rude imitation of a monkey covered with red-lead. The temple had been built by the villagers at a cost of £20 (Rs. 200). The temple of Mahadev (16' x 10') was built of hewn stone and lime and had a terraced roof. It was in two parts, a front to the east being a portico with three pointed arches, and a shrine in the back entered from the portico and containing a *ling* in a case. The temple was built in 1801 by a relation of the village headman or *patil*. In 1827 Captain Clunes notices Loni as belonging to the Dhamdhere family with eighty houses three shops and several wells. [Itinerary, 10.] In 1832 it is noticed as surrounded by a brick wall broken down in places. The inside of the village was dirty and wretched but there were no beggars. [Jacquemont Voyage dans 1' Inde, III. 543.]

MADH.

Madh, a small village ten miles north of Junnar, with in 1881 a population of 899, has a weekly market on Saturday.

MAHALUNGE.

Maha'lunge, on the Sirur-Talegaon road, about eight miles south-west of Khed, with in 1881 a population of 1457, is an alienated village belonging to the Ingle family. A weekly market is held on Monday.

<u>MALHARGAD.</u>

Malha'rgad or Sonari fort, within the limits of Sonari village, about six miles north of Sasvad and three miles west of the Divte pass, is a small double-walled fort crowning a point on the Sinhgad range. About 700 feet above the plain on the Loni, and about 400 feet on the Sonari, side, the fort was about 700'yards round, and, though it had little strength either natural or artificial, its position at the head of the Divte pass was an anxiety and trouble to travellers and caravans. The outer wall of the fort, which followed the triangular form of the plateau, was thirteen feet high and six feet thick, the inner wall which was square with corner bastions of little strength being only six feet thick and about five feet high. The walls are pulled down in places and on the south are completely breached. Besides a main entrance at the north-east corner of the outer wall, the fort has several minor entrances at two corners. Inside are temples of Khandoba and Mahadev and ruins. The water-supply from a cistern and three wells inside the fort is scanty. The beautiful little Fan Palm fern, Actiniopteris radiata, grows in perfection in the crevices of the masonry and few finer specimens of the Maiden Hair fern can be found than in a part of the ruins. The fort was built about 1775 by Bhivrav Yashvant Panse and Krishnaji Madhavrav Panse, proprietors of Sonari village, and was called after the god Malhari because, when the foundations were being dug, blood oozed out of the ground. The blood was understood to be a mark of the displeasure of Khandoba or Malhari the Pance family god, and, after vows to build a shrine to the god and name the fort after him, the work went on and was finished without mishap. [The late Mr. G. H. Johns, C. S.]

MALSIRAS.

Malsiras, [The village is said to have got its name from the stony ground or *mal in which* it stands,] a small alienated village about fifteen miles north-east of Sasvad, with in 1881 a population of 899, has an old temple of Bhuleshvar Mahadev. The temple, which is built of stone and mortar, is sixty feet long and eight-sided and has some faded paintings. The hall or *sabhamandap* in front was built by one Bhargavram Svami. The temple is estimated to have cost about £10,000 (Rs. 1,00,000).[Mr. Norman's Report on Poona temples.] A yearly fair is held at the temple on the last day of *Shravan* or July-August when about 2000 people assemble.

MALTHAN.

Malthan, ten miles west of Sirur, with in 1881 a population of 2135, is a *dumala* or two-owned village belonging to the povar family. The village has a Mahadev temple and a Muhammadan tomb of Ismael Shah Pir. The temple is a fine building, about 200 years old, and lately restored with an additional hall or *sabhamandap* at the cost of the Povar family. In front of the temple, near the entrance, is a lamp-pillar or *dipmal* curvilinear in form and surmounted by a carved square capital. A small fair is held at the tomb on the dark fifth of *Chaitra* or March-April.

MANCHAR.

Manchar, on the right bank of the Ghod about twelve miles north of Khed, is a market town, with in 1881 a population of 4183. The town is surrounded by a wall and belonged to His Highness Holkar till 1868-69 when it became British by exchange. It has a post office and had a municipality from August 1863 to March 1875. A weekly market is held on Sunday. To the west of the town, beyond a watercourse, is a fine Hemadpanti reservoir about twenty-five yards square with two flights of steps leading to the water. Except the west wall which has a niche (3' X 2' 6") with carved side posts and sculptured foliage, the walls of the reservoir are plain. Within the niche is a much worn Devnagari inscription difficult to read. Manchar appears to have been a Musalman town of some importance, and has a small mosque at its south-west entrance. The mosque is entered by a fine single arch surmounted by a projecting and bracketed cornice with a small minaret at each of the four corners. In 1827 Captain Clunes notices it as belonging to Holkar with 200 houses, sixteen shops, 150 wells, and a weekly cattle market. [Itinerary, 18.]

MANKESHVAR.

Mankeshvar, a small village about eight miles north-west of Junnar, with in 1881 a population of 146, has, on a mound, the remains of what seems to be a fine Hemadpanti temple. The remains consist of two or three artistically sculptured pillars without base or capital, some fragments of capitals, and two large bulls or Nandis. Other fragments are probably buried in the mound. The temple is locally believed to have been destroyed by the Muhammadans and a Pir's tomb within a stone's throw to the south of the temple seems to confirm the local story.

MEDAD.

Medad or Amra'vati, on the left bank of the Karha, is a walled village, a mile north-west of Baramati, with in 1881 a population of 866. To the north, commanding the village, is a beautiful fort said to have had a gun as large as any at Bijapur. [Moor's Operations, 345.]

MORGAON.

Morgaon or Moreshvar, a large market town on the left bank of the Karha, about five miles south-west of Supa, with in 1881 a population of 1632, has a large handsome temple of Ganpati. Here Moroba Gosavi, the founder of the Dev family of Chinchvad, used to Worship his favourite deity until its transfer to Chinchvad. [See abore Chinchvad pp. 125-127.] The floor stones of the temple are arranged in the form of a large tortoise.

Near the temple is a rest-house an ornamented square building with a dome. The rest-house was built in 1792 and is of unusually fine Workmanship. A yearly fair is held at the Ganpati temple on *Ganeshchaturthi* the bright fourth of *Bhadrapad* or August-September, and lasts till the tenth of the bright half of *Ashvin* or September-October. A weekly market is held on Sunday. In 1792 Captain Moor describes Morgaon as a large town with a fairly good market, a handsome temple, and a rest-house which was then building.

MULSHI BUDRUKH

Mulshi Budrukh, a small village about ten miles south-west of Paud, with in 1881 a population of 530, has a weekly market on Sunday.

MUNDHAVE.

Mundhave village, about five miles north-east of Poona, had from 1840 to 1842 a nursery garden where Messrs. Sundt and Webbe grew excellent coffee. [See Part II. 77]

NANE.

Na'ne in Maval, about two miles north of Khadkala, with in 1881 a population of 727, has a weekly market on Saturday. In a revenue statement of about 1790 Nane Maval appears as the headquarters of *apargana* in the Junnar *sarkar* with a revenue of £1963 (Rs. 19,630). [Waring's Marathas, 240.]

NANOLI.

Na'noli village, three miles north-east of Talegaon Dabhade, has some old caves in a hill scarp a mile to the north. A steep climb three quarters up the hill leads to the base of a high scarp facing south-west. Skirting this scarp a cistern and a cell are passed, and beyond them a flight of rudely cut steps leads to a square flat-roofed cave (18'x 18'x 7')

now used as a temple dedicated to the goddess Phirangabai. In the south wall of the cave is a small cell. Beyond the cave the scarp is hollowed into two small cells.

NARAYANGAON.

Na'ra'yangaon on the Mina, nine males south-east of Junnar, with in 1872 a population of 3915 and in 1881 of 3447, is a large market town with a post office and a public works bungalow. The weekly market is held on Saturday. The Poona-Nasik road affords good communication to the north and east and a well made local fund road joins the town with Junnar eight miles to the north-west. The town is entered by two main gates, the Junnar gate on the west and the Poona gate on the east. Narayangaon had a municipality from 1861 to 1874, Close outside the Junnar gate is an unfinished mosque with two fine pillars in front and near the mosque is the tomb of a Musalman saint. Further to the west towards Junnar a temple of Vithoba stands picturesquely on the left among fine trees near the Mina. On a hill about a mile to the south of Narayangaon is the tomb of Ganj Pir where a yearly fair attended by one to two thousand people is held on the bright ninth of *Chaitra* or March-April.

Fort.

About three miles east of the town on a detached hill which on the north, south, and west rises sharp from the plain is the dismantled fort of Narayangad (2916). The chief strength of the fort lay in its great natural defences. Its artificial fortifications, which were never very strong, were almost completely dismantled in 1820. Ruins of its north wall and of four of its bastions remain. Inside the fort on the extreme hill top is a small temple of Hatsabai. The water-supply is abundant from two cisterns or tankis fed by springs and several reservoirs or hauds. At one of the cisterns the god Narayan is said to have shewn himself to his devotees about 1830. For two or three years after the manifestation, a fair, attended by thousands of people, was held every Monday in honour of the god. The hill has some other ruins, especially a stone doorway bearing on its lintel a figure of Ganpati and two attendant tigers. The fortress is said to have been built by the first Peshwa Balaji Vishvanath (1714-1720) and given in saranjam or service-grant to Sayaji Povar. In the last Maratha war of 1818 Narayangad is said to have surrendered to the English after only one shell had reached the inside of the. fort. [The late Mr. G. H. Johns, C. S.] In 1827 Captain Clunes notices Narayangaon as a market town or kasba with 700 houses, twenty shops, forty houses of dyers, and 200 wells. [Itinerary, 18.]

NARSINGPUR.

Narsingpur, at the meeting of the Bhima and the Nira, in the extreme south-east of the Poona district, about twelve miles south-east of Indapur, with in 1881 a population of 1004, has a temple of Shri Lakshmi Narsinh with flights of steps leading to the river bed. [Mr. Norman's Report on Poona temples. Dr. Burgess'Lists, 81.] The temple was built by the chief of Vinchur in Nasik about 150 years ago at a cost of about £45,000 (Rs. 4,50,000). The temple is eight-sided, built of black stone, with a gilt apex seventy feet high. Most of the steps are as old as the temple and a ruined part on the south was rebuilt

by Vaman Kelkar a Deshmukh of Aurangabad at a cost of about £1100 (Rs. 11,000). A yearly fair, attended by about 4000 people and lasting two days, is held in honour of the god on the bright fourteenth of *Vaishakh* or April-May.

NAVLAKH UMBRE.

Navlakh Umbre in Maval is an old village about ten miles north-east of Khadkala. The village lies at the source of the Sud a feeder of the Indrayani, and has some interesting Hindu and Musalman remains. The hills round the village enclose it like an amphitheatre. The Hindu remains are a temple of Bahiroba Naukhandi in the hill range and a canopied tomb locally known as Barakhamb or the twelve-pillared. The tomb lies to the north of the village on the left bank of the Sud. The tomb looks like a bandstand and consists of a plinth 23' 3" square raised four feet from the ground and a dome resting on twelve octagonal pillars, arranged in a circle in the plinth. The pillars are 7'5" high. Under the capitals are carvings resembling spear-heads but they slightly differ in form on the different pillars. They are said to represent the leaf of the *suru* or cypress tree. The plinth, pillars, and twelve-sided entablature are of cut stone, and the vaulted dome, which is of burnt brick plastered over, shows signs of decay on the outside. The dome is surmounted by a central ornament with a small piece of wood called *kalas*. The tomb is said to have been built over the remains of his priest or guru by a Jangam Vani of Umbre about 200 years ago. On the plinth, under a boss hanging from the middle of the dome, is a *ling* without a case. On the north of the tomb is an unreadable inscription. To the south of the village, facing a pond, is a mosque, a square and very massive building ornamented with graceful tracery and said to be about 500 years old. It has a well preserved inscription said to contain the builder's name and the date. The gateway of the Moghal office or gadhi is still preserved, [Mr. H. E. Winter, C. S]

Legend.

According to a local story the village was founded about 700 years ago. The Kazi of Umbre has grants one of which is said to be dated as far back as 634 Hijri or about 1235. The present Kazi is an old man named Sayadu Dhondibhai. The traditional explanation of the name Navlakh or nine *lakhs* is that, during the *Divali* holidays in October-November, a daughter of one of the Moghal officers of Umbre asked her father for a present or ovalni [The ovalni ceremony is performed by Hindu sisters to their brothers on the second day after Divali, called the Brother's Second or bhaubij. It consists of the sister waving a light across the face of her brother and of the brother making he a present.] and he ordered her the payment of a day's receipts at the turnspike on the bridle path of Umbre. The toll is said to have been one tankha (½ a.) on animals and head-loads passing to Poona by the Kusur or Khandala passes. The day's receipts are said to have amounted to nine hundred thousand or nav lakh of tankhas or about £2800 (Rs. 28,000) and this event is said to have given the name of Navlakh to the village. [Lady Falkland's version of the story (Chow Chow, I. 238-239) is slightly different. According to her the present was asked by a Musalman queen from her husband. The king was greedy but he could not refuse his wife's request. But he was sorry the queen asked the income of so poor a hill toll as Umbre, which hardly paid, he thought, the establishment, when she might have

asked the toll of a rich place like Lahor or Surat. His surprise was great when he learnt that a day's receipt amounted to nine *lakhs* of *tankhas*.] Umbre is probably the Russian traveller. Nikitin's (1470) Oomri on his way from Cheul to Junnar. From Cheul Nikitin went in eight days to Pilee in the Indian mountains, which is perhaps Pimpri at the head of the Pimpri pass; thence in ten days, Nikitin went to the "Indian" that is Deccan or above Ghat town of Oomri, and from Oomri he went in six days, probably by the old Talegaon and Khed road, about sixty miles to Junnar. [Major's India in XV Century; Nikitin, 9. Nikitin's route is puzzling. It was formerly supposed to have been by Pulu Sonale at the foot of the Nana pass but the position of Pulu Sonale does not agree with the sixteen days between it and Junnar. To explain Nikitin's eight days to the Pimpri pass it may be supposed that he went by Ramraj, Rohe, Ghosala, Tala, Indapur, Nizampur, and Umbardi to Pimpri. Mr. W. F. Sinclair, C. S. suggests that the Nagothna route is more likely. He would place Pilee at Pali fort in the Bhor state.]

NIMBDARI.

Nimbdari, a small village of 655 people, six miles south of Junnar, has a shrine of Renukadevi with a yearly fair on the full-moon of *Chaitra* or March-April attended by about 3000 pilgrims.

NIMGAON.

Nimgaon, an alienated village on the right bank of the Bhima about six miles south-east of Khed, had in 1881 a population of 1121. On a knoll to the north is a temple of Khandoba which was built by Govindrav Gaikvad about the close of the eighteenth century. A yearly fair, attended by about 5000 people, is held at the temple on-the full-moon of *Chaitra* or March-April. The temple enjoys twenty-two acres of rent-free land.

NIMGAON KETKI.

Nimgaon Ketki, eight miles south-west of Indapur, with in 1881 a population of 2408, has a weekly market on Saturday.

NIRVANGNI.

Nirvangni on the Nira, about twelve miles south-west of Indapur, has a temple of Mahadev with a large bull or Nandi. The bull stands under a canopy before the shrine of Mahadev which is to the west. [The space between the bull canopy and the Mahadev shrine has been recently closed by the villagers with masonry.] The shrine is half covered with earth and stones forming a plinth. On the left the bull has a slight scar. The horns, says the story, were knocked off by the Musalmans who were going to break the bull but blood gushed out and they refrained. On a stone, over the plain doorway of the shrine, is an inscription which cannot be made out. All pilgrims to Shingnapur in Satara about thirty miles south of Nirvangni must visit the Nirvangni bull and Mahadev before going to Shingnapur. The legend is that when Mahadev was at Nirvangni the bull strayed into a Mali's garden. The Mali pursued the bull and wounded it on the left side with a sickle or

khurpe and the scar of this wound is still seen on the bull. Mahadev and the bull then went to Shingnapur but the bull came back to the Mali's garden. Seeing that the bull liked Nirvangni Mahadev arranged that he should live at Shingnapur and the bull at Nirvangni, and that every pilgrim to Shingnapur should first visit and pay obeisance to the bull at Nirvangni. [Mr. J. G. Moore, C. S.]

OJHAR.

Qjha'r or Wojha'r, on the left bank of the Kukdi, is a small alienated village six miles south-east of Junnar, with in 1881 a population of 674. Ojhar was the scene of one of the eight incarnations of Ganpati in whose honour a temple is built to the west of the village. [The seven others are at Junnar Ranjangaon and Theur in Poona, at Pali in the pant Sachiv's territory, at Madh in Kolaba, and at Sidhtek in Ahmadnagar.] The temple, which is about a hundred years old, lies in an enclosure entered by a fine gateway. The sides of the gateway have sculptured doorkeepers, and a row of four musicians in bas relief adorns the lintel. All the figures are brightly painted. Within the enclosure are two fine lamp-pillars in front of a fine corridor of seven cusped arches used as a rest-house. The temple is entered by three doors with sculptured side posts and lintels. The east entrance is the chief and bears, over the lintel, a relief figure of Ganpati with parrots and monkeys disporting in trees. A small dome flanked by four minarets surmounts the hall, and over the shrine is a spire adorned with the usual rows of figure-filled niches. The village revenues are alienated to the temple which is managed by the Inamdar. In 1827 Captain dunes notices it as an alienated village with a hundred houses and one shop. [Itinerary, 18.1

OTUR.

Otur, north latitude 19°16'and east longitude 74° 3', on the left bank of the Kushmavati The Kushmavati rises about three miles above Otur from a deep gorge in the Sahyadris under the mountain of Bhambori. It cuts a deep and winding course through the black soil of Otur plain and flows four miles lower into the Kukdi near the Botanical gardens at Hivre Budrukh. The river is unfordable during July and August and almost isolates Otur.] or Mandvi a feeder of the Kukdi, ten miles north-east of Junnar, is a large and rich market town, with in 1872 a population of 6291 and in 1881 of 5780. Otur commands the eastern mouth of the Madmhora valley ending westward in the Malsej pass. About two miles west of the town extends the mountain range which, beginning from the fort of Harishchandragad (4691) at the head of the Malsej pass, forms the northern wall of that valley and is the boundary between the Poona and Ahmadnagar districts at this point stretching far east into the Deccan. The highest points in this range are Gidani, Bhambori, and Chauria, the last within the limits of Otur and about 3700 feet above the sea. Three miles from Otur the Brahmanvada pass, fit for laden cattle, leads to the south-west corner of Ahmadnagar, and twelve miles to the east is the Ane pass, on the Poona-Nasik road, fit for wheels.

Otur has three main entrances, the Rohokad Ves or north gateway, the Nagar Ves or east gateway, and the Junnar Ves or west gateway. Two of these the Rohokad and Nagar are

well preserved. The town has a post office and a Collector's bungalow not far from the northern entrance, a fort, and two temples on the river bank. The fort, near the Junnar gate, was built in the last century to guard against Bhil raids. It was described in 1842 as a small ruined *gadhi* built on rising ground. The fortifications are fast falling into decay. Inside was a large mansion or *vada* able to hold about fifty people. The water-supply was scarce and other supplies not available. The two temples are of Keshav Chaitanya the teacher of the famous Vani saint Tukaram and of Kapardikeshvar Mahadev. Chaitanya's temple is built over the tomb or *samadhi of* that saint. A yearly fair, attended by about two thousand people, is held at Kapardikeshvar temple on the last Monday of *Shravan or* July-August. The temple enjoys a Government cash grant of 4 10s. (Rs. 45) and some rent-free land. Otur had a municipality which was abolished in 1874 at the request of the people. In 1827 Captain Clunes notices it as a market town or *kasba* with 2500 houses and many gardens. [Itinerary, 18.]

PABAL.

Pa'bal, twenty miles west of Sirur, is a market town with in 19 a population of 3565 and in 1881 of 1977. Pabal Vas the head-quarters of a sub-division till 1867, when, on its transfer from Ahmadnagar to Poona, Sirur became the head-quarters of the newly formed sub-division. A weekly market is held on Friday Pabal has a post office, a Hemadpanti temple, and a Musalman tomb. The Hemadpanti temple of Nageshvar, to the west of the town, is said to have been built by one Kanhu Rajpatak. The hall or mandap is divided into three small aisles by two rows of three pillars each, the outermost pillars being slightly sculptured. In front, to the of the temple, is a small Hemadpanti pond said to have been built by a dancing girl a favourite of Kanhu's. Flights of steps lead to the water, and in the side walls are small niches with sculptured side posts. To the north-east of the temple a fine one-stone pillar on a lofty pedestal and supports a huge capital. The tomb, to which a mosque is attached, is in an enclosure to the north of the town The tomb belongs to Mastani, the favourite Musalman mistress of the second Peshwa Bajirav Balaji (1721-1740). Mastani is said to have been captured by Chimnaji Apa in Upper India and presented to Bajirav. She died at the Shanvar palace in Poona, one of whose gates is still called after her, and was buried at Pabal which, with the neighbouring villages of Kendur and Loni, was granted to her.

PADLI.

Pa'dli village, about two miles north-west of Junnar, with in 1881 a population of 258, has a temple of Madhusudan or Vishnu, where a yearly fair, attended by about 3000 people, is held on the dark eleventh of *Ashadh* or June-July. The temple enjoys a yearly Government cash grant of £5 16s. (Rs. 58) and about fifty-six acres of rent-free land assessed at £1 9s. (Rs. 14 $\frac{1}{2}$).

PALASDEV

Palasdev, [A local story, perhaps a play on the name of the village, is that about 200 years ago cattle used to graze on the site of the present village. Some cows were found

dropping their milk over a *palas* tree. The cowherds cut the tree and found in the trunk a sand *ling* over which they built the temple and gave it the name of Palasdev.] formerly called Ratnapur, is a large market village on the Bhima about fifteen miles north-west of Indapur, within 1881 a population of 1431. A weekly market is held on Monday. Palasdev has a temple of Shiv said to have been built by cowherds about 1680. The temple is twenty-eight feet high built of stone for eight feet from the ground and the rest of brick. The shrine is of stone and the spire of stone and brick with a coating of fine lime. An outer wall was built round the temple by one Baburav Jagirdar of Baramati.

PARGAON

Pa'rgaon, a large village eleven miles north-west of Patas, with in 1881 a population of 2285, has an irrigation bungalow and a temple of Tukai Devi said to have been built by the Takavne family. The image was brought from Tuljapur in the Nizam's territories. A yearly fair is held at the temple on the full-moon of *Chaitra* or March-April.

PARUNDE.

Pa'runde, a small village six miles south-west of Junnar, with in 1881 a population of 1007, has an old ruined temple of Shri Brahmanath Dev. A yearly fair, attended by about 2000 pilgrims, is held on the dark fourteenth of *Magh* or February-March. The temple enjoys a Government cash grant of about £3 (Rs. 30).

PASHAN.

Pa'sha'n is a small village of 913 people four miles north-west of Poona, two miles west of Ganeshkhind and about a mile from the Bombay road. The village is pleasantly placed in a beautiful grove on a feeder of the Mula river. The common story of the cowherd watching his milk-less cow and finding it feeding a serpent who lived in an ant-hill is told of Pashan. The cowherd dug the ant-hill, and finding five lings, built a shrine, called it Someshvar, and became its ministrant. The village of Pashan was built near the shrine and a temple was built by the mother of Shahu (1708-1749). The temple, which is enclosed by a high wall, is a heavy sombre-looking square structure built of stone with a brick roof. Two verandas and halls or *mandaps* were added to the main building by one Shivram Bhau about 1780 and the building now measures 36' x 17' X 31'. In front is a bull or Nandi and a lamp-pillar or dipmal. A flight of steps leads from the temple to the river bed where is a square bathing place called *chakratirth* with steps on four sides. In a year of threatened drought the fourth Peshwa Madhavrav (1761-1772) engaged Brahmans to offer prayers at the temple, and when their prayers were heard, he made a grant of a sum of £330 (Rs. 3300) which is still continued. The Brahmans, who are chosen in batches every eleventh day in Poona, besides board and lodging receive each £16 4s. (Rs. 162). They offer prayers from morning to eleven and again in the afternoon. The permanent staff consists of a cook, a clerk, a storekeeper, a Ramoshi, a watchman, and a Kamathi. A yearly fair is held on *Mahashivratra* the Great; Night of Shiv in *Magh* or February-March. The funds are managed by a committee. Pashan has a reservoir which

supplies Government House, Ganeshkhind, and Kirkee with a plentiful supply of good water.

PATAS.

Pa'tas in Bhimthadi on the Poona-Sholapur road, eight miles north-east of Supe and forty miles east of Poona, with in 1872 a population of 2552 and in 1881 of 1692, is a large market village. Besides a railway station two miles to the north, a sub-judge's court, and a post office, Patas has a temple of Nageshvar Mahadev, a rest-house, a mosque, and a weekly market on Thursday. The 1880 railway returns showed 15,067 passengers and 453 tons of goods.

The Nageshvar temple, built of cut and polished stone, consists of a shrine and an audience hall or *sabhamandap* with a veranda on both sides. It is said to have been built about 200 years ago. Patas has two ponds one of which was built as a famine relief work in-1877. But the ponds do not always fill as the rainfall here is precarious.

PAUD.

Paud, on the Mula, about twenty miles west of Poona, is the head-quarters of the Mulshi petty division in Haveli, with in 1881 a population of 1566. Besides the petty divisional revenue and police offices, Paud has a post office and a market on Saturday.

PETH.

Peth, on the Vel, a feeder of the Bhima, four miles north of Khed, is an alienated village with in 1881 a population of 1495 and a post office.

PIMPALVANDI.

Pimpalvandi, with in 1881 a population of 4227, is a large village on the Kukdi, about ten miles south-east of Junnar. The village has a post office and a weekly market on Thursday.

POONA.

Poona [A great part of the Poona city account is contributed by Rav Saheb Narso Ramchandra Godbole, Secretary Poona City Municipality.] City and Cantonment, north latitude 18° 30' and east longitude 73° 53', 119 miles south-east of Bombay and 1850 feet above the sea, cover an area of about 6114 acres, in 1881 had a population of 129,751, and in 1883 a municipal revenue of £23,304 (Rs. 2,33,040).

On the right bank of the Mutha river, in a slight hollow, the city and cantonment are bounded on the west by the Mutha, on the north by the joint Mula and Mutha, on the east by their feeder the Bahiroba, and on the south-east and south by the spurs and uplands that rise to the northern slopes of the Sinhgad-Bhuleshvar hills. Beyond the tree-fringed

line of the Mutha-Mula, to the north with a gentle rise and to the east with a gentle fall, stretches a dry plain without trees and with scanty tillage, broken by scatteed blocks of bare level-crested hills, the outlying eastern fragments of the range that separates the Indrayani and Mutha-Mula valleys. On other sides, except up the Mutha valley to the south-west, the city and cantonment are surrounded by uplands and hills. On the north-west is the soilless Ganeshkhind upland, and on the west, from the rocky slopes of the Chatarsing or Bhamburda hills, bare waving ranges rise to the central peak of Bhanbava. To the south rises the low but sharp-cut and picturesque temple-crowned top of Parvati, and behind Parvati the broken outline of the Sinhgad-Bhuleshvar range.

Geology.

In and round the city and cantonment the underlying rock is basalt. On the neighbouring hills an amygdaloid trap crops out or comes close to the surface. The higher parts of the cantonment have a surface layer of crumbled trap or murum, which in the lower parts passes into a whitish loam, and on stream banks and near the Mutha-Mula turns to a deep black cotton soil. To the west and north-west of Poona, on the Ganeshkhind uplands, in the Government House grounds, and further to the north, where black soil and rock mix at the meetings of the Mula with small local feeders, numbers of pebbles and crystals are found. The chief of these are white chalcedonies in large quantities, red carnelians, bloodstone, moss agate, jasper, and rock crystal. [Mr. T. M. Filgate. The richness of the neighbourhood of Poona in agates and pebbles is noticed by Lord Valentia in 1803. (Travels, II. 103). The abundance of agates and crystals suggests, as is noted below under History, that Ptolemy's (A. D. 150) 'Punnata in which are beryls, refers to the Deccan Poona, perhaps to distinguish it' from punata without beryls in Maisur. [Compare Mr. Rice in Indian Antiquary, XI. 9]. Beryl the Greek berylos, though now technically used of only one emerald-like stone, seems originally to have been a general term. It apparently, is the Arab *bilauri* crystal.]

Aspect.

The land between the Mutha-Mula and the Sinhgad hills is a wooded plain, rising slightly to the south and east, the surface unbroken except near the river and along four of its smaller feeders which cross the plain from south to north. The area covered by the city and cantonment includes three belts, a western a central and an eastern. In the west is the city, with, in the heart of it, thick-set streets and lanes, and on the north and south fringes of rich garden land. The central belt, to the east of the city with poor soil and broad tree-lined streets, is, except the thickly-peopled Sadar Bazar in the south, parcelled among detached one-storeyed European dwellings whose sameness is relieved by scattered public buildings, the Council Hall (52). [The number in brackets after this and other names is the serial number of the . object in the lists of Objects of which details are given below,] the Sassoon Hospital (101),the Synagogue (113), St. Mary's and St. Paul's churches (109 and 111), the Arsenal Water Tower, and the Military Accounts Office (84). The eastern belt, with a gentle fall to the Bahiroba stream, except some garden-land in the north-east, is a bare rocky plain crossed by roads lined with young trees, and skirted by blocks of one or two-storeyed stone barracks and rows of detached officers' dwellings.

The River.

One [Mr, R. G. Oxenham, Principal Deccan College.] of the chief beauties of Poona is its river, the Mutha-Mula, formed by the meeting, about three quarters of a mile west of the railway station, of the Mutha from the south-west and the Mula from the north-west. About a mile and a quarter north-east of the Railway Station (97), at the Bund Gardens (47), about 200 yards above the FitzGerald bridge (63), the Mutha-Mula is crossed by a stone weir or Bund built in 1850 by Sir Jamsetji Jijibhai at a cost of £25,749 18s. (Rs. 2,57,499). Except when floods dash several feet deep over the weir and fill the lower bed from bank to bank, the water, even in the rainy months, falls from the weir shallow and clear only partly covering the rocks of the lower river-bed. During the rainy months, to clear silt and let the muddy flood waters pass, the side sluices are left partly open. The sluices are generally closed in November; in average seasons the flow of water is nearly over by the end of December, and in the river below the weir lines of sedge fringed pools lie in a broad bed rough with ridges and boulders of trap. Above the weir, through the cold and hot months of all ordinary seasons, the river is navigable for pleasure boats as far as the old masonry bridge known as Holkar's Bridge (75), a distance of about three and three quarter miles. About one and a half miles of this distance, from the weir to the meeting of the Mutha and Mula, is nearly south-west. Above the meeting the Mula curves to the north and north-east as far as Holkar's bridge. At about throe quarters of a mile below Holkar's bridge, or almost three miles above the weir, on the right or eastern bank of the river is Rosherville the meeting place for the Boat Club. Above Holkar's bridge are some rocky barriers, but during freshes boats can go to the Powder Works dam, two miles above Holkar's bridge. Above the Powder Works dam another navigable reach stretches about three miles as far as the village of Dapuri above the Peninsula railway bridge (96).

From the FitzGerald bridge looking west is one of the prettiest views in Poona. On the right, about 150 yards from, the river, a rocky flat-topped hill rises about 150 feet above the bank and stretches about 300 yards west gradually falling to a small river-bank tomb. On the left are the trees and flowers of the Bund garden, the higher tree-tops half hiding the distant broken line of the Sinhgad-Bhuleshvar hills. In front, from the edge of the dam, between low tree-fringed banks, the river, about 200 yards wide, stretches west about half a mile to where it is divided by a long low woody island. Beyond the island, as it turns south-west to the meeting of the rivers, the water passes out of sight in the green Kirkee plain behind which the low rounded blocks of the Ganesh khind and Bhamburda hills lead to the central peak of Bhanbava.

About 1700 feet above the FitzGerald bridge, hid in trees on the south or right bank of the river, is the Boat House of the Poona Boat Club, well supplied with the ordinary Thamesbuilt racing and pleasure boats. Above the boat-house, with a nearly uniform breadth of 200 yards, the river stretches a little south of west about three quarters of a mile to where a large and a small woody island divide the stream. On either side of the large island is a channel, a main or western channel always open for boats, and a narrow eastern passage open only in floods. Above the island the river gradually widens, till, a little below the meeting or *sangam* of the Mutha from the south-west and the Mula from the north-west,

it is 430 yards across, that is 140 yards broader than the Thames at London Bridge. At this point a remarkable he gives back clearly spoken words three times or even more A little below the meeting of the Mutha and the Mula is perhaps the most picturesque spot in the three miles boating course. In the foreground are the woody islands and the mouth of the Mutha spanned by the Wellesley and railway bridges, its left bank crowned by the lofty trees which surround the Judge's house and its right bank ending in a cluster of temples joined to the water by nights of steps. From the middle distance rises the bold temple-topped rock of Parvati and behind Parvati stretches the level scarp of Sinhgad. Above the Sangam a rough dam, 500 yards beyond the railway bridge, makes the Mutha impassable to boats. But the Mula, with an average breadth of about fifty yards, between low banks, the left babhul and bamboo fringed, the right studded with houses of which the chief is Sir A. Sassoon's Garden Reach, winds, passable for boats, a mile and a half higher to a resting place named Rosherville, where, on the right or eastern bank, a landing stage is moored and seats and refreshments are provided. The boating course from the boat-house to Rosherville is about a furlong short of three miles. In the yearly Regatta the racing-course is from Rosherville down to a point opposite to Garden Reach, a distance of one mile. The racing course, with the exception of one slight bend about a third of a mile from the start, is straight.

Roads.

In the city most of the roads, though smooth and clean, are narrow crowded and occasionally broken by sharp turns, but otherwise Poona is well supplied with broad smooth roads generally lined and in places overshadowed with trees. Along these roads the three favourite drives are, to the west and north, to the east, and to the south and south-west. From the railway station as a centre the chief drive to the west is by the Sassoon Hospital (101), across the Mutha by the Wellesley Bridge (117), past the Science College (102), and along the Kirkee road, returning across the Mula by Holkar's Bridge (75) and the Deccan College (53), crossing the Mutha-Mula by the FitzGerald Bridge (63) and back past the Bund Gardens, a distance of about seven miles and three quarters. This drive can be varied and lengthened by leaving the Kirkee road a little beyond the Science College, passing along the Bhamburda road and round the Ganesh-khind grounds, and back through the Kirkee cantonment to Holkar's bridge. The whole length of this outer round is about eleven and a half miles. The drive to the east is through the Civil lines past the Club (49)and St. Mary's Church (109) through the Vanavdi lines, round the race-course, through the Ghorpadi lines, and back by the Bund gardens (47). The length of this round is about seven and a quarter miles. The south drive is through the Civil lines and the Sadar Bazar to the west, past the lake and hill of Parvati (90), to the north-west over a rather rough river-bed to the Lakdi bridge, and from the Lakdi bridge back by Bhamburda, the Wellesley Bridge, and the Sassoon Hospital. This round is about ten and a half miles.

City.

For description the city and cantonment of Poona come most conveniently under three parts, a western a central and an eastern, poona City, the western division, has spread so

far eastward, and has been so nearly met by the outlying streets of the Sadar Bazar and of the Civil lines, that, in passing from one to the other it is not easy to say where the cantonment and civil lines end and the city, begins. The eastern limit of the city may be fixed at the left bank of the Manik stream, which, after & winding north-west course, falls into the Mutha about 300 yards above its meeting with the Mula. From the left bank of this stream the city of Poona stretches about a mile and three quarters west along the right bank of the Mutha river. The city varies greatly in breadth. In the east the part covered with houses is not much more than a mile across. From this it gradually widens to about a mile and three quarters, and then narrows in triangular shape, the tip of the triangle lying close to the bridge known as the Lakdi Bridge about one and a half miles above the meeting of the Mutha and Mula. For municipal and other purpose this city area is divided into eighteen wards or *peths*. These may be roughly grouped into three divisions, the eastern the central and the western. The eastern division, most of which dates since the beginning of British rule, lies between the left bank of the small winding Manik stream and the right bank of the larger less irregular Nagihari, which, after a westerly course, joins the Manik stream as it falls into the Mutha. West of the Nagihari the city proper, the Poona of Muhammadan (1290-1636) and early Maratha (1636-1686) days, with its centre and original starting point at the younger Shaikh Salla's mosque (31), once the temple of Puneshvar about 1000 yards above the meeting of the Mutha and Mula, stretches about a mile along the river bank and runs inland about one and a half miles. West of the city proper the third division, stretching along the river bank about 800 yards and gradually narrowing to a point near the Lakdi bridge, consists of suburbs founded in the later days of the Peshwa rule (1760-1818).

As it is built according to no regular plan, and has only two main streets and many narrow broken and winding lanes, Poona City is difficult to describe. Most of its roads, though well kept and clean, are narrow with side-gutters either open or covered with stone slabs and with rows of houses generally built close to the roadside. Some of the houses are one-storeyed, little better than sheds, with long sloping tiled roofs and low plain front walls of unbaked brick coated with white earth. Other houses are twostoreyed, the under storey with a heavy tile-covered eave resting on plain square wooden pillars the upper storey plain, with perhaps a row of arched wooden windows closed on the outside with plain square shutters and slightly shaded by a shallow eave. In other houses the ground-floor stands back and beams of wood support an overhanging upper storey with a more and less ornamental balcony and a heavy upper eave. Every now and then the line of commoner dwellings is broken by some large building, either a new house two or three storeys high with bright wood work and walls of burnt brick picked out with cement, or the long blank walls of one of the old mansions. The overhanging irregular wood work, the sharp turns and windings, and the variety in size and style of houses, make some of the streets picturesque in places, and trees planted at the roadsides, or, oftener, hanging from some garden or temple enclosure, give many of the streets a certain greenness and shade. In the western wards the roads are broader, and both there and in the south-west they are bordered by long lines of garden Walls. Most of the houses are poor, but the lanes are redeemed from ugliness by occasional temples, houses with picturesque overhanging balconies, and magnificent nim, pipal, and banian trees growing in raised circular pavements. The lanes are quiet, with few people and little cart or

carriage traffic, with here and there a grain or a sweetmeat shop, and wells with groups of water-drawers. The main streets are called after the days of the week. Only two of them, Aditvar and Shanvar, differ much from the lanes in breadth or in the style of their buildings. Aditvar or Sunday Street and Shanvar or Saturday Street the main lines of traffic, vary from twenty to thirty feet in breadth and have paved footpaths running inside of a covered gutter. The houses vary greatly in size and appearance. A few are onestoreyed little more than huts, the greater number are either two or three storeys high, and some are large four-storeyed buildings. The style of building is extremely varied. The middle-class and commonest house stands on a well built plinth of cut-stone three to four feet high, with a row of square plain wooden pillars along the edge of the plinth, and, resting on the pillars, a deep heavy eave roofed with rough flat Deccan tiles, and a plain wooden plans running along the front of the eave. In these houses the face of the upper storey is sometimes nearly plain with a beam that only very slightly stands out from the wall and with a very shallow eave. In others the wood work stands further from the wall, is more or less richly carved, and is shaded by a deep upper eave. Some have a balcony with a light balustrade two or three feet high, and a slight shade overhead supported by slanting poles. On both sides of the street the ground-floors are occupied by shops with cloth-blinds hanging about halfway down from the edge of the eaves. The shops are well stored with grain and pulse, with sweetmeats, cloth, stationery, ornaments, and vessels of brass copper and iron. The streets are crowded with carts and carriages. The people are busy, bustling, Well fed, and well dressed; and the number of new houses in almost every quarter of the town, some of them, large and striking even alongside of the old mansions and palaces, gives the city an air of much prosperity. On the whole the city is well shaded. Even in the busiest parts are richly wooded gardens with temples and cocoapalms and black tapering cypress trees, and along the south-west and south are large areas of enclosed orchards and gardens. The roofs of several of its high mansions command good general views of the city. [Among the best view-points are the pavilions on the roofs of the Purandhare's (27) and Kibe or Mankeshvar mansions in Budhwar ward, and the Bohoras' Jamatkhana (8) in Aditvar ward.] The foreground is of highpitched house-roofs varying much in size and height but all brown with rough flat Deccan tiles. Here and there parallel lines of roofs mark a street or a lane, but in most places the roofs rise sometimes close together, sometimes widely apart and almost always without apparent system or plan. Among them, at considerable distances, stand out the high roofs of old mansions, crowned with small flat-topped or tile-covered canopies, and the lofty gable ends of new dwellings with white cement and fresh brick and mortar walls. Breaking and relieving the lines of roofs, over the whole city and especially among the rich garden lands to the south and south-west, rise single trees and groups of *pipals*, banians, nims, and tamarinds, almost all large and well grown, and many lofty and farspreading. There are almost no mosques or domed tombs. But on all sides, from among the trees and house-roofs, stand out the white graceful spires of Hindu temples.

Under the Musalmans (1290-1636) the military portion of the town or *kasba* was enclosed by a wall built, like other Deccan village walls, of mud and bricks on stone and mud foundations. The wall was called the Pandhri or White wall and is now called the Juna Kot or Old Fort (24). It stretched from the younger to the elder Shaik Salla's tomb along the bank of the Mutha river, leaving both the mosques outside of it. From the elder

Shaikh Salla's tomb the wall turned south to the north-east corner of the Mandai or Market ground, where was a gate called the Konkan Darvaja or Konkan Gate. The stone steps which led to this gate remain. From the Mandai the wall passed east along the backs of houses on the north side of Dikshit and Pethe streets to Pethe's cistern. It then turned north and continued almost straight to the younger Shaikh Salla's tomb. Midway between Pethe's cistern and the younger Shaikh Salla's tomb was another gate facing east called the Nagar Darvaja or Ahmadnagar gate. The site of the Nagar gate can still be traced, exactly opposite Lakdi street. The Maruti which belonged to this gate remains. The wall was in the form of an irregular rectangle, the sides being north 280, south 260, west 130, and east 200 yards. It had several bastions and loopholed parapets. Two small gateways which led to the river on the north have only lately disappeared. Flights of steps leading to the river from these gates remain and are known as Purandhare's Steps and Sapindya Mahadev's or the Twelfth Day Funeral God's Steps. On the south, to the east of Moghe's mansion, was another small gate but neither its site nor its name is known. The remains of the wall may be traced all along its course, and in many places the foundations and plinth are unharmed. The wall, which was about fourteen feet high and four feet broad, rested on a plinth of stone and mud sixteen feet high and six feet broad. It was built about 550 years ago by one Barya Jamadar, an Arab, who is said to have been the first commandant of Poona. [Mr. N. V. Joshi's Poona, Ancient and Modern (1868), 5.] The army and its followers with a few Muhammadan villagers were alone allowed to live within the wall. The traders, Brahmans, Hindu cultivators, and others, with the village officers lived outside of the wall to the east. In 1755 the third Peshwa Balaji Bajirav (1740-1761) determined to build a wall round the whole city, and entrusted the work to Jivajipant Khasgivale who was commandant or *kotval*. According to the local story Ram Raja (1749-1777) of Satara considered that only villages and not large towns with powerful masters should be walled, and ordered the work to be stopped. According to Grant Duff, and this is probably the true reason, the Peshwa on second thoughts decided that walls might be a danger as their strength might tempt the head of the state to stand a siege in the city instead of retiring to the strong hill fort of Purandhar. Whatever the reason, the work was abandoned. The unfinished part may be seen near the Nagihari or Cobra stream which passes north through the east of the city. The wall seems to have been intended to be fifteen feet wide and thirty-five feet high and to be built partly of solid stone and lime masonry and partly of mud and sun-dried bricks. Starting from the north-east corner of the Old Fort, near the younger Shaikh Salla's tomb, the new wall was carried east along the Mutha to where it met the Cobra stream. Near the younger Shaikh Salla's tomb, opposite the present dam or dharan known as the Dagdi Pul or Stone Bridge, a gate called the Kumbhar Ves or Potters' Gate was removed about 1835 when Mr. Forjett was head of the Poona police. The roadway was raised eight feet when the dharan or causeway was built across the river. The little shrine of Maruti, which used to stand at the west end of the gate, may now be seen in the middle of the street. From the Potters' gate to the Cobra's stream the wall, built of mud and sun-dried bricks, went along the high ground forming the Kumbhar ward and the Kagdipura or Papermakers' ward. It contained doorways leading to the river, but no important gates. From the south-east limits of Kagdipura the wall turned to a bend of the Nagihari and then south along its left bank. It can be traced to a point known as the Baramori or Twelve Sluice gate on the Ganesh ward road. The length of the wall from the younger Shaikh Salla's tomb to the

Nagjhari is about 350 yards, and the length from the Nagjhari to the Baramori is 850 yards. Between the Nagjhari and the Baramori were two gates. The chief gate, which was in the street known as Lakdi street, leading from the Nagar gate of the Old Fort, was called the Mali Ves or Gardeners' Gate and was close to the gardeners' rest-house or *chavdi*. The second gate was on the approach to the present Daruvala's or Powdermaker's bridge; its name is not known.

Wards.

The City is (1884) divided into eighteen wards *styled peths*, irregular in shape and varying greatly in size. They are of ancient origin and are maintained for revenue, police, municipal, and other administrative purposes. Some of them were founded by the Muhammadans and had Muhammadan names. In 1791 these names were changed, and, in imitation of the town of Satara, some of them were given the names of the days of the week. The wards or divisions, beginning with the part nearest the railway station on the east of the Nagjhari, are six: Mangalvar or the Tuesday ward next the river, and, working back, Somvar or the Monday ward, Rastia's, Nyahal's, Nana's, and Bhavani's. To the west of the Nagjhari are twelve wards: next the river is the Kasba the oldest part of the city, Aditvar or the Sunday ward, Ganesh, Vetal, Ganj, Muzafarjang's, and Ghorpade's. West of these, next the river, are Shanvar or the Saturday ward, Narayan, Sadashiv including Navi, and behind them, to the east, Budhvar or the "Wednesday and Shukravar or the Friday wards.

The following statement shows for the eighteen wards a total area of 9,828,000 square yards and an increase in people from 73,209 in 1851 to 99,421 in 1881. The details are:

Poona City Wards, 1851-1881,

| No. | NAMES. | TOTAL AREA. | AREA UNDER HOUSES. | PEOPLE. | | | |
|-----|-----------|---------------|-----------------------|---------|-------|-------|--|
| | | | | 1851. | 1872. | 1881. | |
| | | Square Yards. | Square Yards. | | | | |
| 1 | Mangalvar | 485,000 | 340,000 | 1195 | 1742 | 2192 | |
| 2 | Somvar | 545,000 | 479,000 | 1752 | 2995 | 3808 | |
| 3 | Rastia | 365,000 | 225,000 | 2533 | 3676 | 4267 | |
| 4 | Nyahal | 105,000 | 75,000 | 665 | 832 | 1107 | |
| 5 | Nana | 525,000 | 365,000 | 2866 | 4544 | 5408 | |
| 5 | Bhavani | 1,235,00 0 | 672,000 | 3606 | 5204 | 6737 | |
| 7 | Kasba | 575,000 | 575,000 | 8831 | 10,85 | 11,89 | |

| | | | | | 5 | 0 |
|----|-------------|---------------|---------------|------------|-------|------------|
| 8 | A'ditvar | 325,000 | 325,000 | 7461 | 8928 | 9726 |
| 9 | Ganesh | 155,000 | 155,000 | 3612 | 3760 | 3695 |
| 10 | Vetal | 195,000 | 195,000 | 3366 | 4293 | 4458 |
| 11 | Ganj | 405,000 | 285,000 | 3742 | 4433 | 4969 |
| 12 | Muzafarjang | 23,000 | 23,000 | 85 | 34 | 90 |
| 13 | Ghorpade | 655,000 | 325,000 | 1936 | 1119 | 1139 |
| 14 | Shanvar | 445,000 | 445,000 | 5152 | 7323 | 7786 |
| 15 | Narayan | 375,000 | 375,000 | 3646 | 3582 | 3563 |
| 16 | Sadashiv | 2,275,00 0 | 1,209,00 0 | 7142 | 8015 | 8306 |
| 17 | Budhvar | 185,000 | 185,000 | 4518 | 5881 | 6083 |
| 18 | Shukravar | 955,000 | 556,000 | 11,70 1 | 13,13 | 14,13 7 |
| | Total | 9,828,00 0 | 6,808,00 0 | 73,20 9 | 90,43 | 99,42 1 |

Mangalvar.

Mangalvar Ward, 800 yards by 600, with an area of 485,000 square yards and 2192 people, was originally called Shaistepura after its founder Shaistekhan, the Moghal viceroy of the Deccan, Shaistekhan's governorship lasted from 1662 to 1664. Grant Duff's Marathas, 86-89.] who in 662 was sent to Poona to suppress Shivaji. It has almost no shops and most of the houses are one-storeyed. Except two or three Brahman families of hereditary accountants the people are poor Marathas, Mhars, and Halalkhors. The Marathas are cultivators or labourers, and a few earn their living by making split pulse. The Mhars are chiefly village servants, municipal servants, or labourers, and a few work on the railway. The Halalkhors are chiefly employed as municipal sweepers. The only important road through Mangalyar ward is the approach to the principal fodder and fuel market and cart-stand and to the District Judge's court-house. The other pathways are narrow lanes. The conservancy arrangements are good but there are no proper sullage sewers. The ward is not unhealthy, and the population is scanty. Mangalvar has considerably fallen in importance during the past sixty years. From being the marketplace of the old town if has sunk to be the resort of a few pulse-makers. Several ruined mansions bear traces of former prosperity. The only object of note is the fuel and fodder market in the open ground to the north-east of the ward. During the fair season about 500 cart-loads of fuel and fodder are brought in daily and sold.

Somvar.

Somvar Ward, 800 yards by 680, with an area of 545,000 square yards and a scanty population of 3808, was established in 1755 and was originally called Shahapura. Its chief inhabitants are rich Gosavi jewel-dealers and moneylenders, a few Sali weavers, and some Government servants. The houses are large, have generally upper storeys, and are neatly built though wanting in light and air. Thereare no shops. One large street leads to the railway station. The others are narrow crooked lanes well kept and clean. The water supply is fair and the ward is not unhealthy. It has fallen in importance during the past thirty years, as much of the trade, of which the Gosavis had formerly the monopoly, has passed into other hands. The chief objects of note in Somvar ward are Nageshvar's (17) and Vishnu's temples (38), the latter with a water-lead and a public cistern.

Rastia.

Rastia's Ward, 920 yards by 400, with an area of 365,000 yards and 4267 people, was originally called Shivpuri from a temple of Shiv built by Anandrav Lakshman Rastia, the hereditary head of the Peshwa's Horse. The first occupiers of the ward were Rastia's cavalry. The houses are one-storeyed with small backyards. The people are of all castes, chiefly Mudliars from Madras and Bene-Israel Jews originally from the Konkan. Rastia's ward is one of the healthiest and best laid out parts of the city and has a large number of well-to-do Government servants, civil and military pensioners, and a few tradesmen. The streets are broad and straight and the houses are built with brick in straight lines, back to back, with straight narrow sweepers passages between the backyards. The streets and lanes are clean, the conservancy efficient, and the water-supply abundant from a great water-lead from a stream in Vanavdi about four miles to the south-east. Rastia's ward is the healthiest in the city and is not overcrowded. It has prospered during the past thirty years. The most noteworthy object is Rastia's mansion, an immense building (29). A large fair is held yearly in *Shravan* or July-August in honour of Shiralshet a Lingayat Vani banker who is said to have flourished about 500 years ago.

Nyahal.

Nyahal's Ward, 360 yards by 280, with an area of 105,000 square yards and 1107 people, is named after Nyahal, a retainer of the Khasgivale (1755) to whom the third Peshwa Balaji Bajirav entrusted the building of the new walls. It is a small healthy ward. A few well-to-do Prabhus and other retired Government servants have built neat dwellings in it. Most of the other houses are one-storeyed and belong to tailors and weavers in cotton and wool. This ward has no shops. Two streets run through it, both highways from the centre of the city, one to the railway station and the other to the cantonment. The conservancy is good, The ward drains into the Nagjhari stream.

Nana or, Hanuman.

Nana or Hanuman Ward, 1040 yards by 500, with an area of 525,000 yards and 5408 people, was founded by Nana Fadnavis in 1791 for the use of wholesale grain-dealers by whom it is still chiefly peopled. The houses are partly upper-storeyed in large enclosures, partly small. The grain-dealers are chiefly Marwar and Gujarat Vanis, men of means. A

number of Pardeshis have organised a carting business between this ward and the railway station. The large number of country carts which come daily to this quarter of the city give employment to several carpenters and blacksmiths. Many landholders let their enclosures as cart-stands, and also act as brokers or dalals in getting employment for the carts. Since the opening of the railway the carting trade has greatly increased. A number of shoemakers or Mochis, from the North-West Provinces and Oudh, make boots for the European and Native troops and for the residents of Poona cantonment which borders on Nana's ward. Part of this ward is held by Mhars and Mangs who find employment as grooms and house servants among the residents of the cantonment. It also contains a number of low-caste prostitutes who live in the quarter known as the Lal or Gay Bazar. There is a small municipal meat market. Nana's ward has one leading street which is the main communication between the city and the cantonment bazar. It is broad and straight, like several others in this quarter, which are well made and metalled. The conservancy is good and the water supply from four public cisterns is abundant. The ward has no sewers. The sullage gathers in cesspools and is removed by manual labour. Nana's ward is thriving and new houses are being yearly added. It is not thickly peopled and is healthy. Its chief objects are: the Agyari or Parsi Fire-temple (62); the Ghodepir or Horse Saint (13), where during the Muharram a sawdust and stucco tabut or tomb-image is set on a wooden horse and worshipped; Nivdungya Vithoba's temple (21); and a chapel for the Roman Catholic population of the city and cantonment (22).

Bhavani.

Bhavani Ward, 1500 yards by 825, with an area of 1,235,000 square yards and 6737 people, was also founded by Nana Fadnavis for the use of traders during the time of the seventh Peshwa Savai Madhavrav (1774-1795) and called Borban or the Jujube Copse. It took its name from a temple of the goddess Bhavani belonging to the Deshmukhs. The chief people of Bhavani ward are well-to-do Vanis, wholesale dealers in groceries and oilseeds and general brokers or commission agents, a number of Marwar Vanis who also deal in old furniture and lumber and many carriers who own carts specially made for carrying heavy loads from and to the railway station. One quarter is set apart for Kamathis, another for Kaikadis, a third the Kumbharvada for potters, a fourth for Sarvans or Musalman camel-drivers, and a fifth for Malis, vegetable and sugarcane growers. Almost all of these classes are comfortably off. Bhavani ward has two main streets running east and west which meet at their eastern ends and run into the cantonment bazar. The houses of the upper classes are upper-storeyed and built in lines, and those of the poorer classes have only one. storey and are irregularly built. In the east of the ward are several well-built Poona and Bombay Parsi residences. The conservancy arrangements and water supply are good. Bhavani ward is less healthy than the north of the city and less prosperous than Nana's ward. The chief objects are Bhavani's (7) and Telphala Devi's temples.

Kasba.

Kasba Ward, 800 yards by 720, with an area of 575,000 square yards and 11,890 people, is the oldest inhabited part of Poona city. It is called Kasba because it was the head-

quarters of a sub-division of the district. Compared with the eastern wards the population is dense and the death-rate high. Except a few large old mansions of chiefs and gentry most of the houses are small and poor. There are no shops. Except some high Brahman families the people of Kasba are chiefly craftsmen, papermakers in Kagdipura, potters in Kumbharvada, fishermen in Bhoivada, Mujavars or keepers of the two Shaikh Salla shrines, copper and silver smiths in Kasar Ali gardeners in Malivada, and Brahman astrologers and Brahman priests in Vevharali. As the ground is rough with ruins the lanes are narrow crooked and broken by dips and rises. Even the main thoroughfare to the District Judge's court is narrow, crooked, and uneven. The conservancy is good. Sewers carry off the sullage, and the surface drainage is greatly aided by the unevenness of the ground. Kasba ward has remained steady since the beginning of British rule. Its objects are: the Ambarkhana (1), the Purandhare's mansion (27), the elder and the younger Shaikh Sallas tombs (31), and a temple of Ganpati (12). Under municipal management much has been done to improve this ward.

Aditvar.

Aditvar or Ravivar, the Sunday Ward, 750 yards by 475, with an area of 325,000 square yards and 9726 people, was originally called Malkampura, and was founded in the time of the third Peshwa Balaji Bajiray (1740-1761), by Mahajan Vevhare Joshi. It is thickly peopled and is the richest ward in the city, the business centre of Poona. The houses are large and strongly built, except in one or two poor quarters, all having an upper storey and many two storeys. The houses fronting the main streets have their ground-floor fronts set out as shops, the back parts and upper floors being used as dwellings generally by the shopkeepers. The people of Aditvar ward are mixed and are the richest in the city. The Moti Chauk or Pearl Square, at the north end of the chief street, has Gujarati Vaishnav and Jain banking firms on the upper floors, the ground floors being occupied by wholesale grocers. Further south in Saraf Ali or Moneychangers' Row on the east side are jewellers, on the west side Brahmans Sonars and Kasars who manage the sale of the Poona brass and copper ware, one of the most prosperous industries in the city, the articles being sent chiefly to Berar and Nizam Haidarabad and occasionally to other parts of India. Further south along the street are Bohoras, some dealers in iron and tin ware, others in silk and embroidered cloth, others in stationery and haberdashery; mixed with the Bohoras are some Jingar or native saddle and horse-gear sellers; still further along are the chief turners who make wooden toys, and a few Marwar Vanis who deal in small brass castings, bells, cups, saucers, and tumblers. The eastern street has the chief establishment for grinding flour in Maide Ali. At the south end is the Kapad Ganj or Cloth Store, where wholesale and retail cloth-merchants live. Further north is the Badhai Row where Badhais or Upper Indian carpenters make and sell wooden toys, boxes, and cots. Beyond the Badhais are a few vegetable shops, then a fish market, and the stores of lime and charcoal makers and sellers. On the south-east and south-west flanks are two meat markets, the south-east market kept by the Municipality. In the eastmost end of Aditvar ward are two horse dealers, and veterinary stables where horses are imported, exchanged, and sold. There is also a grass market in a building known as Durjansing's Paga or the horse lines of Durjansing a Rajput cavalry officer. Among the mixed dwellers in Aditydr ward a few are Brahmans and most are of the different craftsmen classes. The

leading streets are broad, especially in the Moti Chauk or Pearl Square, which is the handsomest street in the city, with broad paved footpaths, the shops opening on the central cart and carriage road. The conservancy of Aditvar is good; there is abundance of water, and there are underground sewers for sullage and surface drains for flood water. Still the ward is not healthy. The banking firms are said to be on the decline, due to the Government money order system, the greater safety of investment in Government loans or savings bank, and the restriction of currency to silver. Other trades and crafts flourish. The chief objects of Aditvar ward are Phadke's Mansion (26), the Bohoras' Jamatkhana or Meeting-house (8), the Jama or Public Mosque (14), and Someshvar's temple (34).

Ganesh.

Ganesh Ward, 600 yards by 260, with an area of 155,000 square yards and 3695 people, takes its name from the god Ganesh. The ward was founded by Jivajipant Khasgivale, during the rule of the seventh Peshwa Savai Madhavrav (1774-1795). The houses in Ganesh ward are poor, few except those fronting the main streets having upper storeys. The people are of low caste, labourers, artisans, shoemakers, carpenters, coach-builders, basket-makers, and the like. The chief timber stores of Poona are in Ganesh ward. It has no other industries and no shops. The streets in Ganesh ward are broad, the lanes narrow but straighter than in other parts of the city, and all are metalled or sanded and kept clean. The conservancy is good, but the ward though prosperous is comparatively unhealthy. Its objects are: the Dulya or Rocking Maruti's Temple (11), and the Dagdi Nagoba where a fair is held on Nagpanchmi or the Cobra's Fifth in *Shravan* or July-August.

Vetal.

Vetal Ward, 800 yards by 240, with an area of 195,000 square yards and 4458 people, originally called Guruvar or Thursday ward, was founded by Jivajipant Khasgivale in the time of the third Peshwa Balaji Bajirav (1740-1761). It continued to be called Guruvar until a temple was built to Yetal the Lord of Demons. The main street of Vetdl ward is a southerly continuation of the main street of Aditvar and is like it in construction. The houses are closely built with upper storeys, the lower being used as shops and the upper as dwellings, The chief shopkeepers are Jingars originally saddle-makers, or Tambats that is coppersmiths. The best goldsmiths of Poona live in Vetal ward, Kachis or marketgardeners who deal in fruit and vegetables have a quarter of the ward, Dhangars or shepherds have another, and potters a third, and there are a few flower sellers, Gujarat brass and copper dealers, and Momin and other Musalmans, silk weavers and spinners. Most of the craftsmen's houses have no upper storey. Vetal ward is on a high level and is healthy. The water supply is less plentiful than in low-lying wards but it is not scanty, and the conservancy is good. The leading roads are broad metalled thoroughfares and the lanes are broader and straighter than in other parts. At the south of this ward three mansions have been built by three Bombay merchants, Nana Shankarshet, Keshavji Naik, and Trimbakji Velji. Lately, Trimbakji's house has been bought by the Society for the Propagantion of the Gospel and turned into a mission house and school under the management of missionaries of the Society of St. John the Evangelist. A little colony of Native Christians lives in and round this mission-house. Vetal ward has prospered during

the past thirty years. A vegetable, meat, and fuel market is held daily. Its objects are: Shri Parasnath's Jain temple (25), Vetal's temple (37), the Mission House, and the Raje Bagsher's Takya.

Ganj.

Ganj or Store Ward, 900 yards by 450, with an area of 405,000 square yards and 4969 people, takes its name from having been the chief salt store in the city. Most of the houses have only one storey and belong to the poorer classes of craftsmen and labourers, Momin silk-weavers, Sali cotton-weavers, Koshti spinners and weavers, Kunbi Joshis or fortune-tellers, Tumbdivales or Bairagis who change small metal pots for old clothes, Lingayat and Maratha Dalvalas or pulse-makers and salt-sellers, a few Sangar wool-weavers and felt-makers, tanners of the Chambhar Saltangar and Dhor classes, and some Pardeshi masons or Gavandis. Ganj ward is healthy, the conservancy is good, and the water supply though not abundant is not scanty. It is a prosperous ward though almost the whole people are low class. It has no object of interest.

Muzafarjang.

Muzafarjang Ward, 300 yards by seventy-five, with an area of 23,000 square yards and ninety people, is the smallest ward in the city. It is much like Ghorpade's ward. It takes its name from its founder Muzafarjang who is said to have been a leading captain under one of the Ghorpades.

Ghorpade.

Ghorpade's Ward, 900 yards by 725, with an area of 655,000 square yards and 1139 people, was established by Maloji Raje Bhonsle Ghorpade in the time of the seventh Peshwa Savai Madhavrav (1774-1795) and called by the founder's surname. It was originally occupied by Ghorpade's cavalry. It is now occupied by dealers in skins and hides, tanners, shoemakers, husbandmen, and poor Musalmans. It is the poorest ward in the city. The houses are mostly ground-floor huts. The roads are not regular though broad, the water-supply is scanty, and the conservancy arrangements are fair. It is not prosperous. The Ghorpade family once had a large mansion in this ward but it has fallen to ruin and been pulled down. It has no object of interest.

Shanvar.

Shanvar or Saturday Ward, 750 yards by 600, with an area of 445,000 square yards and 7786 people, was founded about the close of the seventeenth century by the Musalmans and named Murchudabad. As the west end and airiest part of the city it rose to importance under the eighth or last Peshwa Bajirav (1796-1817) when many Brahmans built houses in it. The houses are comfortable, upper-storeyed, strongly made buildings, with more or less large enclosures. There are no shops. The people are chiefly rich high-class Brahmans, some the descendants of old families of position, others of families who have risen to position and wealth in the service of the British Government. The chief

vegetable and fruit market of Poona, the Mandai, is hold in Shanvar ward on the border of Kasba ward in the open ground in front of the Shanvar Palace, also called the old Palace, the state residence of the Peshwas (1760-1817). This was styled the Old Palace to distinguish it from the new or later built palace in Budhvar ward. The whole Shanvar ward has underground sewers in fair order, and the general conservancy of the ward is excellent. Still, especially in the cold weather, it is feverish perhaps owing to its trees and its nearness to the river. Its objects are: Shanvarvada, the Old Palace which was burnt in 1825 and is now the head-quarters of the police (32), the Mandai the chief market-place of the city, Omkareshvar's temple (23), Harihareshvar's temple, Amriteshvar's temple (2), Shanvar Maruti's temple, the Panjarpol or Animal Home (4), and eighteen family mansions. [These are: Sanglikar's, the younger Jamkhandikar's, Rastia's, Natu's, Mehendale's, Gadre's, Gole s, Alibag Bivalkar's, Rayrikar's, Parasnis', Hasabnis', Chandrachud's, the younger Purandhare's, Shirke's, Thatte's, Rajmachikar's, Bavdekar's and Apte's.]

Naravan.

Narayan Ward, 1130 yards by 325, with an area of 375,008 square yards and 3563 people, is the westmost ward in the city on the river side. The ward was founded during the time of the fifth Peshwa Narayanrav Ballal (1773) and named after him. The streets are broad. Its western position made it a great rice centre Marwar Vanis sought for houses and gradually brought all the Mavlis or West Poona rice growers under their power. The Marwars houses are ill-built, low, and badly aired, and the ground floor fronts are used as shops. The rest of the people of Narayan ward are husbandmen, labourers, and shepherds. The south-east quarter which is called Dolkar Ali, is held by Brahmans who have large enclosures and well built houses. It is a popular quarter and many houses have lately been built by Poona Brahmans. The original Marwari rice market has declined. The streets are metalled and the conservancy is fair. The west is not so well provided with public cisterns as the east, but almost every house has its well of whole some water. As a whole Narayan ward is healthy and prosperous.

Its objects are Modicha Ganpati's temple, Maticha Ganpati's temple, Ashtabhuja or the Eight-armed goddess's temple, the Gaikwar's mansion, and Mankeshvar's Vishnu.

Sadashiv.

Sadashiv Ward, 1800 yards by 1275, with an area of 2,275,000 square yards and 8366 people, was founded by Sadashivrav Bhau, cousin of the third Peshwa Balaji Bajirav (1740-1761) on the site of a garden called Napur. The people of Sadashiv ward are chiefly Brahmans and there are some large well built *chals* or lodgings for the use of the poorer classes who are chiefly paid or hired house servants. The houses are the best built residences in the city two or more storeys high and each in an enclosure. The Brahmans in this quarter are either political pensioners or retired Government servants. A few are moneylenders. When founded this ward was occupied by the military, the streets are consequently broad and the thoroughfares laid out in regular squares. The Peshwas' state prisoners were kept in this ward under the charge of the military force of which

Sadashivray Bhau, the founder of the ward, was the first commander. Under the eighth or last Peshwa Bajirav (1796 -1817) the Sadashiv ward stretched to Parvati and was the most populous part of the city. It declined with the removal of the Maratha soldiery and the market disappeared. Sadashiv ward has the best kept and best made roads in the city. It has underground sewers for sullage and rain water, a plentiful water supply, and a good conservancy. It is not so healthy as it ought to be, perhaps from the richness with which some of the gardens are manured. Of late years Sadashiv ward has become popular and many good houses have been built. Part of Sadashiv ward is called Navi or new because it was built after Poona passed to the British. Its people are husbandmen, shoemakers, and Mangs. It has some timber fuel and grass stores. The felling of old mansions was at one time a trade in which several people made fortunes. Its objects of interests are: the Lakdi Pul or Wooden bridge now of stone, Vithoba's Murlidhar's and Narsoba's temples (19), Khajina Vihir, Nana Fadnavis' cisterns and water-lead, Vishrambag mansion partly destroyed by fire in May 1879 (40), the Pratinidhi's mansion or Got, Sotya Mhasoba's temple, the Sassoon Infirm asylum (30), Parvati lake (91), Turquand's garden-house where Mr. Turquand of the Civil Service committed suicide, and Nana Fadnavis' garden.

Budhvar.

Budhvar Ward, 460 yards by 400, with an area of 185,000 square yards and 6083 people, is the heart of Poona city. It was founded by the Emperor Aurangzeb in 1690 and was first called Mahujabad. It was afterwards peopled by Govind Shivram Khasgivale in the time of the fourth Peshwa Madhavrao Ballal (1761-1772). It is the most peopled part of the city and has several retail markets. The streets were once very narrow but of late years the leading thoroughfares have been widened. The houses are closely built and have one or two upper storeys. The ground floor fronts as elsewhere are let for shops, the back parts and upper rooms being private dwellings. Beginning from the north end of the ward, the first section of the main street contains grocers' and scent-sellers' or Gandhis' shops. Near the site of the Budhvar Palace (9), which was destroyed by fire in May 1879, are shops of flower-sellers, stationers, and druggists. Near the Tulsi Bag (37) or Basil Garden end of the street a building in the centre of the street, called the Kotval Chavdi (15) was the chief police office in the Peshwas' time. The building has been sold by Government and is now used as a vegetable market. The street running east and west by the site of the Budhvar Palace contains on the west Hindu confectioners' shops, and, further on, snuffmakers' petty grain-Sealers' and flour-sellers' shops. The eastern section contains a few silk weavers who dress ornaments and trinkets in silk, and the leading doth merchants or Shimpis of the city who chiefly sell the produce of local hand-looms. The street is called Kapad Ali or Cloth Row. It once had a well-built pavement and long lines of platforms in the centre on which shops were laid out and a market was held daily called the Men Bazar or Settled Market. The Budhvarvada or Wednesday Palace (9), the favourite residence of the last Peshwa (1796-1817), stood in the centre of this ward and contained all the leading local revenue, police, and judicial offices. In the corner nearest the cross streets was the Native General Library and Clock Tower presented to the city by the chief of Vinchur in commemoration of the visit of H. R. H. the Duke of Edinburgh to India in 1872. The palace, as well as the Library pd the Vinchur Clock Tower, were destroyed by an incendiary on the night of the 13th of May 1879. As it contains the Anandodbhav (3)

and Appa Balvant theatres as well as the chief business centres, Budhvar ward is a favourite resort in the afternoons and evenings. The people of Budhvar ward are extremely mixed all being traders and well-to-do. The water-supply is plentiful, the streets have under ground sewers and side channels for rain drainage, and the conservancy is good. It is healthy and prosperous though the population is thick and the houses are badly aired. Its chief objects are: Belbag temple (6), Bhangya Maruti's temple, the Kotval Chavdi (15), Tambdi Jogeshvari's temple (35), Kali Jogeshvari's temple, Khanali Ram's temple, Moroba Dada's mansion (16), Bhide's mansion, Dhamdhare's mansion, Thatte's Rani's temple, and Pasodya Maruti's temple.

Shukravar.

Shukravar Ward, 1750 yards by 550, with an area of 955,000 square yards and 14,137 people, was established by Jivajipant Khasgivale in the time of the third Peshwa Balaji Bajiray (1740- 1761)1 Jivajipant, as kotval or police head of Poona, for many years exercised great magisterial and, revenue powers. He is said to have been intelligent and able and to have taken much interest in the welfare of the city. He founded several wards, regulated public markets and places of amusement, and did much to further the prosperity and welfare of the people of Poona. Shukravar is the largest ward in the city both in area and population. The houses in the leading parts are upper-storeyed, roomy, and substantial. The houses of the poorer classes, in the back and distant parts, have only one floor but they are not closely built and are comparatively roomy. The people are most mixed, belonging to all castes and in every condition of life, from the Pant Sachiv of Bhor a Brahman chief to the day-labourer. Jivajipant Khasgivale, the Kotval of Poona and the founder of the ward, left a residence with a large garden, and temple attached to it. Beginning from his residence, which is at the north-west end of the ward, the main street runs south, and passes through lines of dwellings of rich Brahmans to the site of the Shukravar Palace (33) which was pulled down about 1820 and the Peshwa's Talimkhana or gymnasium where are now the municipal office, and the dispensary established in 1861 by Khan Bahadur Pestanji Sorabj a Parsi gentlem an of Poona. Further south the street passes by the Pant Sachiv's mansion and Panse's mansion to the City Jail (10) which was the head-quarters of the Peshwa's artillery of which the Panses had charge. West of the street is the Kamathi quarter occupied chiefly by people of Kamathi or Telugu castes, who, in the Peshwa's time, were domestic servants of the leading Brahmans and Maratha grandees. Beyond Kamathipura the street passes through houses belonging to Maratha husbandmen and Native Christians. The east street of Shukravar runs parallel to the main street and borders on the Aditvar ward. At the north end of it is a large retail grain market; further south is the Shimpi row held by Shimpi cloth-merchants. Behind the main houses on the east is the Hattikhana or elephants' stable, now filled with the huts of Chambhars. Further to the south are the Alang or infantry lines occupied chiefly by labourers. Further north-east, along the main street, was the old Gadikhana or Peshwas' stables, now occupied by dwelling houses Further still is the residence of the late Nandram Sundarji Naik, an enterprising and intelligent Pardeshi Kumbhar, who had a large share in the early municipal management of Poona city after it came under the British Government. Further is the Chaudhari's mansion and then a quarter occupied by a small colony of Pardeshi potters who either work as labouring masons or take jobs as

contractors. At the south end of this street is the house of Mr. Bhau Mansaram, another enterprising and active Pardeshi potter, who has amassed a fortune as a contractor in the Government Public Works Department, and is a Municipal Commissioner for the city of Poona. Beyond this are the Malivada and the Jhagdevada quarters occupied by Kunbis and husbandmen. The leading roads of Shukravar ward are broad, straight, and metalled. The lanes are narrow and crooked but have latterly been all levelled and sanded and thrown open where they were previously closed. The water supply is abundant and the conservancy good. Shukravar is one of the healthiest quarters of the city and is prosperous and flourishing. Its objects of interest are: the Tulsi Bag or Basil Garden (36), Lakadkhana, Kala Haud or the Black cistern, Bavankhani, Rameshvar's temple (28), the Peshwa's Gymnasium now the municipal office and dispensary, the City Jail (10), Pant Sachiv's palace, Chaudhari's mansion, Nandram Sundarji's mansion, Bhau Mansaram's residence, the Hirabag or Town Hall and garden, and a temple of Parasnath.

Streets.

The chief streets run north and south. The three leading streets are the Ganj, Ganesh, and Mangalvar street; the Vetal, Aditvar, and Kasba street; and the Shukravar and Budhvar street. All of these are broad metalled roads with stone-built slab-covered side-gutters. When metalled roads were first made, a convenient width, varying from eighteen to twenty-four feet, was taken for the clear carriage roadway, and spaces meant for footpaths were left on the sides. These, before municipal times, were encroached on by bouse-owners or covered with low unsightly verandas with sloping tiled roofs. No through streets run east and west, and the broken streets of which there are some, have also been encroached on and narrowed by veranda-building. It has been one of the chief aims of the Municipality to widen the streets and open them as opportunity offers. Much has been done in this way, but a great deal remains to be done. The streets are generally of irregular width and winding. Where they have not been encroached on, the streets of the newer parts of the city, as in the Rastia Nana and Sadashiv wards, are broad, straight, and regularly laid out. The handsomest street in the city is the Moti-chauk or Pearl Square in Aditvar ward. Between lines of closely built high buildings this street has a carriageway twenty-four feet wide in the centre, then covered side-gutters three feet wide on each side, and next paved footpaths fifteen, feet wide, raised about a foot above the carriageway. All the streets in the city have metalled carriage roads, varying from sixteen to forty feet in breadth, and side-gutters covered with slabs where the traffic is great and open in other places. Where available the spaces between the gutters and the lines of houses have been and are being planted with trees and laid out in gravelled walks. The city has now thirty-two miles of metalled road. The lanes vary in breadth from six to sixteen feet. They are crooked and used to have many ups and downs. They have lately been levelled and gravelled and, where possible, widened and opened. The whole length of lanes within city limits is fourteen miles. Under the Marathas some of the streets and lanes were paved, the pavement sloping from the houses to the centre which formed a gutter for storm-water during the rains. The centres of the broader thoroughfares used then to be occupied by lines of stalls on raised platforms. Almost every street and lane had gates which were closed at night. The pavement, shop-platforms, gates, and other obstructions have now been removed and the ventilation of the city improved. The streets are now

named, swept clean once a day, watered during the dry weather to lay the dust, and on dark nights lighted with 572 kerosine lamps.

Bridges.

Poona City has the Mutha river on the west and north. The oldest crossing of the Mutha is by the Kumbhar Ves Dharan or Potters' Gate Causeway in Kasba ward, near the younger Shaikh Salla's tomb (31) and about 600 yards above the railway bridge. The Maratha causeway gave way soon after the beginning of British rule and was renewed between 1835 and 1840 at a cost of about £3000 (Rs. 30,000) partly met by Government and partly by contributions. The causeway, which is of solid stone masonry, is 235 yards long and seven yards broad. It has twelve nine-feet sluices which are closed in the dry season to store water. During floods the causeway is covered and impassable. At the north-west end of the city, about a mile and a quarter above the Potters' Gate dam, the Maratha wooden bridge across the Mutha gave way in 1840 and was replaced by a stone and brick masonry bridge which is still known as the Lakdi or wooden bridge. The present bridge has nine forty-eight-feet arches built of brick on stone piers which have sharp cut, waters to break the force of the floods. Large round holes are made high up on the spandrels between the arches through which water passes during the highest floods. The roadway over the bridge is eighteen feet wide. The bridge cost £4700 (Rs. 47,000) of which Government paid £3600 (Rs. 36,000). Before the railway was made the Lakdi bridge was the outlet to Bombay and carried much traffic. It is still largely used chiefly in bringing supplies of wood and provisions into the city. The second and chief bridge over the Mutha is the Wellesley Bridge named after General Arthur Wellesley in honour of his Deccan victories. The old bridge was built in 1830 entirely of wood. In 1839 it was replaced by a strong masonry bridge at a cost of £11,093 (Rs. 1,10,930), and a fresh bridge was built also of stone in 1875. The bridge keeps its original name of Wellesley or Vasli in Marathi. The Nagihari stream which passes through the city from the south is crossed by six bridges. Beginning from the north, the Jakat or Toll bridge of cut-stone masonry with three twelve-feet wide vents, twenty-four yards long and with a roadway of twenty feet, joins the Mangalvar and Somvar wards on the east or right bank with the Kasba ward on the west or left bank. It was built by the British Government between 1836 and 1840. It is called the Toll bridge because it is on the the of the Peshwas' chief toll. About four hundred yards south, joining the Somvar Rastia and Nyahal wards on the east with Aditvar ward on the west, is the Daruvala's bridge, the largest across the Nagihari, of cut-stone masonry fifty-eight yards long and over thirty-two feet broad, with four twelve-feet vents. It was built by the Municipality in 1870 at a cost of £1500 (Rs. 15,000). It gets its name from being near the firework-makers' quarter. About 300 yards south of Daruvala's bridge, joining Ganesh ward with Rastia ward, a footbridge called the Parsi bridge, a stone causeway impassable in floods, is six feet wide and has three fivefeet vents. It was built in 1830 by the family of the Parsi high-priest or Dastur. About 150 yards south of the Parsi bridge, the Ganesh ward bridge, of cut-stone with twenty-feet roadway and three arches of sixteen feet each, joins the Ganesh and Nana wards. It was built by the British Government in 1835. About 400 yards south of Ganesh ward bridge the Burud or Basketmakers' bridge, of cut stone masonry with eighteen-feet roadway and four nine-feet arches, joins the south end of Aditvar ward on the west to Bhavani ward on

the east. It takes its name from the basket-makers in whose quarter it lies. It was built by a Badhai or Upper Indian carpenter between 1840 and 1845 as a work of charity. About 300 yards south of the Burud's bridge, Ghasheti's bridge, of solid stone masonry, twenty feet broad and with three eighteen-feet arches, joins Bhavani ward on the east with Ganj and Vetal wards on the west. It was built as a work of charity in 1845 at cost of £180 (Rs. 1800) by a dancing-girl named Ghasheti. The Manik stream, which forms the eastern boundary of the city, is crossed by three bridges. Beginning from the north, about 150 yards from its meeting with the Nagihari, where the bed of the Manik is at times impassable from backwater from the river, the Halalkhor bridge, a massive masonry structure sixty-eight yards long and eighteen feet wide with three five-feet vents, joins the Somvar ward on the south with the Halalkhor section of the. Mangalvar ward on the north. It was built by the British Government between 1835 and 1840. About 500 yards in a direct line south-east of the Halalkor bridge is the Gosavi bridge. It is a double masonry bridge, both portions skew to the line of the stream, of two single arches of twenty-two feet span, the roadway over the one being twenty-four and over the other thirty-two feet wide. It was built in 1870 by the Municipality at a cost of £300 (Rs. 3000). About 350 yards south of the Gosavi bridge, the Bhatti Gate bridge, a small culvert of two seven-feet vents, opens Rastia ward into the Civil Lines quarters. It was built by a public works contractor in 1845 and took its name from the brick and tile kilns near it.

Houses.

The municipal statements divide the houses of the city into five classes: large mansions or vadas, how rarely built and becoming fewer costing £2000 to £6000 (Rs. 20,000 - 60,000) to build and £5 to £7 10s. (Rs.50 -75) a month to rent; second class houses, of which the number is growing, costing £800 to £1500 (Rs. 8000 -15,000) to build and £2 to £4 (Rs. 20 - 40) a month to rent; third class houses, of which the number is growing, costing £100 to £300 (Rs. 1000-3000) to build and 8s. to £1 (Rs.4-10) a month to rent; fourth class houses costing £20 to £50 (Rs. 200 - 500) to build and 2s. to 4s. (Rs. 1 - 2) a month to rent; and fifth class houses or huts costing £2 to £5 (Rs. 20 - 50) to make and 6d. to 9d. (4-6 as.) a month to rent. The poorest classes have rarely houses of their own, but lodgings or chals are being made for them in different parts of the city, neater and better-planned than their former huts. According to the municipal returns for 1883, of 12,271 houses, 85 were of the first class, 631 of the second class, 2699 of the third class, 4197 of the fourth class, and 4659 of the fifth class. The details are:

Poona Houses, 1883.

| No. | WARD. | CLASS. | | | | | |
|-----|-----------|--------|------|------|------|------|--------|
| | | 1st. | 2nd. | 3rd. | 4th. | 5th. | Total. |
| 1 | Mangalvar | | 1 | 19 | 80 | 200 | 300 |
| 2 | Somvar | 2 | 25 | 89 | 166 | 122 | 404 |

| 3 | Nyahal | | 7 | 23 | 49 | 15 | 94 |
|----|-------------|----|-----|------|------|------|--------|
| 4 | Rastia | 2 | 24 | 98 | 223 | 130 | 477 |
| 5 | Nana | | 40 | 133 | 197 | 248 | 618 |
| 6 | Bhavani | 4 | 26 | 133 | 254 | 521 | 938 |
| 7 | Kasba | 3 | 50 | 268 | 582 | 593 | 1496 |
| 8 | A'ditvar | 36 | 263 | 468 | 370 | 319 | 1456 |
| 9 | Ganesh | | 12 | 133 | 159 | 166 | 470 |
| 10 | Vetal | 3 | 23 | 172 | 238 | 257 | 693 |
| 11 | Ganj | | 2 | 86 | 257 | 528 | 873 |
| 12 | Muzafarjang | | | 2 | 2 | 7 | 11 |
| 13 | Ghorpade | | | | 28 | 284 | 312 |
| 14 | Shanvar | | 22 | 174 | 258 | 128 | 582 |
| 15 | Narayan | | 2 | 86 | 181 | 239 | 508 |
| 16 | Sadashiv | | 25 | 194 | 369 | 200 | 788 |
| 17 | Budhvar | 19 | 67 | 196 | 225 | 63 | 550 |
| 18 | Shukravar | 16 | 52 | 425 | 559 | 649 | 1701 |
| | Total | 85 | 631 | 2699 | 4197 | 4659 | 12,271 |

Poona houses have little beauty or ornament; even the finest are plain, massive, and monotonous. The plinth is of close-joined blocks of polished stone. The posts and beams are massive but short. The ceilings are made of smaller closely fitted beams sometimes ornamented with variegated geometrical figures and flowers made of small chips or slits of gaily painted wood or ivory. If width is wanted it is secured by two or three rows of wooden pillars joined together by ornamental ogee-shaped cusped and fluted wooden false arches. The pillars, which generally spring from a carved stone or wood pedestal, have shafts carved in the cypress or *suru* style and lotus-shaped capitals. The eaves are generally ornamented with carved plank facings and project boldly from the walls. The roofs are either terraced or covered with flat tiles. The staircases are in the walls, and are narrow and dark. At present in house-building more attention is paid to light and air, the staircases are improved, and ornamental iron or wood railings are coming into use for balconies landings, and staircases. Most houses stand on stone plinths. They are generally wooden frames filled with brick or mud and covered with a tiled roof. Some are substantially built of brick and lime others are wholly of brick and mud. The centre rooms are generally dark and close, but the upper storeys are airy and well lighted. The walls of some are painted with Puranik war scenes and deities. The houses of the betteroff have two and some have three to six rooms one of which is the cook-room or sayampak-ghar, another if there a one to spare is set apart as the god-room or devghar, one or more an used for sleeping, one large room as the *maighar* for dining and sitting

and one, which is generally open on one side, as a reception room or osri. Most of the rooms are badly aired. Houses of this class rarely have upper storeys. Their long slopes of tiled roofs and low slender wooden posts give them a mean poverty-stricken look. Middle-class houses have generally an upper floor over part of the basement. Open spaces or yards called *angans* are left in front and behind. Sometimes, over the entrance gate, is a hall or divankhana which is used on great days and family ceremonies. Under this hall stables, cattle-sheds, and privies, open on the road. Each house has generally a well, and sets apart the room nearest the well for cooking, and the next room for dining. A room is set apart for the women of the house and the front room is used for visitors. The side-rooms are used as god-rooms and store-rooms. The upper rooms, which are well aired, serve as sleeping rooms. The centre rooms on the ground floor are generally illaired and so dark that, even by day, lights have to be used during meals. The walls and floors are cowdunged or mud-washed and kept clean. The houses of the upper classes are upper-storeyed in two or three quadrangles or chauks surrounded by rooms. The paved back quadrangles, where there is generally a well, are used for washing and bathing. The distribution and general arrangement of the rooms is the same as in middle-class houses. The open rooms on the basement near the entrance are used as stables, cattle-sheds, and servants' rooms. Almost every Hindu house, from the poorest hut to the richest mansion, has a few plants near it among which the sacred basil or tulsi is the most prominent and stands in an ornamental earthen pot on a stone or cement pedestal. Near the place where the waste water gathers are generally a few plantain trees or a small bed of alu or caladiums as they are believed to suck in and to clean stagnant water. The houses of the poorer classes have generally one room eight to ten feet square with a small door shaded by an open veranda four to six feet wide, a part of which is enclosed for a bath-room or nhani.

Population.

The earliest record of Poona population is for 1780 when it is roughly estimated to have numbered 150,000 souls. During the eight years (1796-1803) of unrest in the beginning of Bajirav II.'s reign, the population fell considerably, chiefly through the depredations of Daulatrav Sindia his father-in-law Sarjerav Ghatge and Yashvantrav Holkar, and then rest scarcity of 1803. At the beginning of British rule the estimated population varied from 110,000 to 150,000; and in 1825 Bishop Heber puts down the number at 125,000. The first reliable record is for 1851 when it numbered 73,209. The opening of the railway in 1856 raised the number to 80,000 in 1864, and since then there has been a steady advance to 90,436 in 1872 and 99,622 in 1881. [The figures for 1872 and 1881 do not include the population of Poona and Kirkee cantonments which was 28,450 in 1872 and 37,381 in 1881.] Of the 1872 total, 80,800 were Hindus (including 587 Jains), 9013 Musalmans, 262 Christians, and 361 Others. Of the 1881 total 87,874 were Hindus, 10,519 Musalmans, 562 Christians, 206 Parsis, and 461 Others.

Priests.

Priests numbering 1062 are mostly Hindus and a few Musalmans. The Hindu priests, who are almost all Brahmans live mostly in Brahman quarters in the Budhvar, Kasba,

Narayan, Sadashiv, Shanvar, and Shukravar *peths*; but the most popular wards are the Sadashiv and Shukravar *peths*. Most of them are hereditary priests and are fairly off, but not so well off as they were some fifty years ago. Of late they do not command respect, and crave favour and cringe for patronage. Their number is falling off, and only one or two members of priestly families take to priesthood.

They are thrifty, well-behaved and shrewd, but rather idle. Their wives mind the house and do no other work. They send their boys to school, and as priesthood does not pay them much, some of them teach their boys English. Like Hindu priests, Musalman priests are not much respected, and are fairly off. Besides Hindu and Musalman priests there is one Parsi priest, who is respected well-paid and is comfortably off.

Lawyers.

Lawyers numbering 126, of whom ninety-six hold *sanads* or certificates and thirty are allowed to plead without *sanads*, are mostly Brahmans. They are well-behaved, respectable, shrewd, and thrifty. Most of them are men of means and lend money. Their wives do the house work generally with the help of servants, and their boys go to school and learn English.

Government servants.

Government servants live in all parts of the town. They are Brahmans, Prabhus, Marathas, Hindus of other castes, Musalmans, Parsis, Christians, and Jews. Of the Brahmans Chitpavans or Konkanasths Deshasths and Shenvis are largely in Government service. Chitpavans came to Poona during the supremacy of the Peshwas who were themselves Chitpavans. Deshasths are old settlers, and Shenvis, most of whom are Government clerks, are mostly new-comers. Some Brahmans hold high places in the revenue judicial and police branches of the service, others are clerks, and a few messengers and constables. The Prabhus, who are of two divisions Kayasths and Patanas, are chiefly clerks and a few hold high revenue and judicial posts. The Kayasths came from the North Konkan during Maratha rule and some of them are settled in the town. Patanas mostly went from Bombay with the English and except a few are not permanently settled. The Marathas are constables and messengers and a few clerks. With the exception of a few who are clerks, Hindus of other castes are constables and messengers. The Musalmans are constables and messengers, a few are clerks, and some hold high posts. The Parsis Christians and Jews are mostly clerks. Of Government servants Hindus are thrifty and others love good living and spend much of their income. Of both Hindus and others only those in high position are able to save. Their wives do nothing but housework, and all but a few messengers and constables send their boys to school.

Practitioners.

Besides the Government medical officers and teachers of the Medical School, Poona medical practitioners include graduates in medicine, retired subordinate employes of the

Government medical department, Hindu vaidyas, and Musalman hakims. The graduates and pensioners of the medical department are Brahmans, Kamathis, Marathas, Musalmans, Parsis, and Christians. They prescribe European medicines and a few of them keep dispensaries. They get fixed fees for visits and charge separately for prescriptions dispensed in Medical Practitioiners their dispensaries. Except Kamathis and Marathas who are more or less given to drink, most of them, especially the graduates, are hardworking thrifty and respectable. They get good practice and save. Their wives do nothing but house work and they send their children to school. Vaidyas or Hindu physicians are mostly Brahmans and live in the Brahman quarter. They prescribe native drugs and are generally called to attend women who often refuse to take English medicines. *Hakims* or Musalman physicians live in the Musalman quarter, and practise among Musalmans. The vaidyas and hakims get no fixed fees and often bargain to cure a certain disease for a certain sum of money. They are fairly off and do not save much. Besides these regular doctors, there are midwives and Vaidus or wandering drughawkers. The Vaidus mostly came from the Nizam's country and settled near Poona in the times of the Peshwas. Except a few leading men, who study their Sanskrit books written on palm leaves, most of them receive oral instructions, hawk drugs in streets, and prescribe and bleed among the low classes. They hardly earn enough to maintain themselves and are badly off. Besides minding the house their wives hawk drugs and make and sell quartz powder for drawing traceries on house floors. They teach their boys their craft and do not send them to school.

Landlords.

Landlords include *inamdars* or estate-holders, large landowners, and house-owners. *Inamdars* are mostly Brahmans and Marathas. Partly from the number of dependants and partly from the large sums they spend on marriages and other ceremonies men of this class, especially Marathas, are badly off and most of them are in debt. They send their boys to school and some of them, especially Brahmans, have risen to high posts in Government service. Large landowners are men of all castes. They are well-to-do and educate their children chiefly for Government service and as pleaders. House-owners are Brahmans, Gujarat Vanis, Bohoras, and Musalmans. For the last twenty years houses have been in great demand and house-building has become a popular form of investment. Like large landowners they are well-to-do and send their children to school.

Pensioners.

On account of its cheap living, good climate, and the facilities it affords in educating their children, Poona is becoming a favourite place with pensioners. There are about 240 civil and about 250 military pensioners, the civil pensioners living mostly in the Sadashiv, Shanvar, Shukravar, and Rastia wards and the military pensioners mostly in the Rastia, Nana, and Bhavani wards. They are well-behaved and thrifty, and most of them have some money which they lend on security. They take great care in educating their boys.

Moneylenders.

Of 297 moneylenders the chief are Brahmans, Marwar and Gujarat Vanis, living mostly in the Sadashiv, Shukravar, Narayan, Budhvar, and Kasba wards. Brahmans lend money on the security of ornaments; and Gujarat and Marwar Vanis lend on credit and charge high rates of interest. They, especially Gujarat and Marwar Vanis, are very shrewd and careful in businses.

Moneychangers.

Moneychangers numbering 310 are chiefly Deshasth Brahmans who live mostly in the Shukravar, Kasba, Ravivar, and Bhavani wards. They sit by the roadside, buy copper coins on premium from, retail sellers and give copper for silver coins without charge. They give small loans to retail dealers at heavy interest and are not very scrupulous in their dealings. They have their own little capital, get brisk business, but are not well-to-do. They teach their boys to read and write Marathi.

Grain Dealers.

Grain Dealers, including about fifteen brokers, number about 200 and live mostly in the Bhavani and Nana wards. They belong to two classes wholesale and retail dealers. The wholesale dealers numbering about forty are chiefly Gujarat and Marwar Vanis. They sometimes act as brokers, and are hardworking, shrewd, and well behaved. They are rich, bringing large quantities of grain chiefly wheat and *bajri* or spiked millet from Vambhori in Ahmadnagar, Indian and spiked millet from Sholapur, and rice from the Mavals in the west of Poona and from Kalyan in Thana. Of 160 retail dealers 108 are Marathas, forty-seven Marwar Vanis, and five Lingayats. They buy grain from wholesale dealers and brokers. They have no capital of their own and have to borrow at nine to twelve per cent on the security of their stock. They are orderly hardworking and thrifty, and have credit with moneylenders. "Wives of poor grain-dealers clean and winnow grain, arrange shops, and act as saleswomen. They teach their boys to read and write Marathi.

Vegetable Sellers.

Vegetable Sellers including brokers number 652, chiefly Kachis and Malis, living mostly in the Ravivar, Kasba, Budhvar, Shanvar, Bhavani, Vetal, Shukravar, Mangalvar, Nana, and Sadashiv wards. The Kachis came from Bundelkhand and Rajputana. Vegetable-growers bring vegetables to the market and sell them to the retail dealers. Sometimes the retail dealers buy the standing crop and bring it to the market in required quantities. Besides the local business, brokers make large purchases for Bombay vegetable-dealers and send consignments of vegetables to Bombay on commission. As a class they are hardworking, orderly, and thrifty. They are fairly off, and their women, who act as saleswomen, do more work than the men. They are not careful to send their children to school.

Grocers.

Grocers, including forty brokers, number 745 and belong to two classes, wholesale and retail grocers, living chiefly in the Ravivar, Vetal, Kasba, Budhvar, Bhavani, Somvar, Ganesh, Nana, Shanvar, and Narayan wards. Brokers and wholesale grocers are chiefly Lingayat Vanis, and a few Gujarat Vanis and Marathas. Retail grocers are chiefly Gujarat Vanis, a few being Lingayat Vanis, Marathas, and Brahmans. They deal in sugar, clarified butter, spices, honey, and salt. Formerly salt was sold by a body of Lingayat Vanis, who lived in separate quarters called Mithganj or the salt market. Brokers and wholesale grocers are rich and retail grocers are well-to-do. They are hardworking, orderly, shrewd, and thrifty. In poor families, in the absence of men, women act as saleswomen. They send their boys to school.

Milk and Butter Sellers.

Milk and Butter Sellers numbering 315 are local Gavlis or cowherds, living chiefly in the Shukravar, Sadashiv, Ravivar, Kasba, Narayan, and Shanvar wards. They are Lingayats and Marathas. They keep ten to twenty-five she-buffaloes and about three or four cows. During the rainy season much butter is brought by Mavlis from the Mavals or West Poona hills. Gavlis are idle, quarrelsome, and thriftless. They have no capital, live from hand to mouth, and are often in debt. Their children graze cattle and their women hawk milk, curds, whey, and butter.

Liquor Sellers.

There are seventeen liquor shops in the city, ten country liquor shops and seven European liquor shops. Country liquor is sold by Maratha servants of the liquor contractor, and European liquor shops are kept mostly by Goanese Native Christians.

Cloth Sellers.

Cloth Sellers numbering 483 are chiefly found in the Budhvar, Ravivar and Shukravar wards. They are Hindus and Musalmans. The Hindus are chiefly Marwar Vanis and Shimpis and a few Bralimans and Marathas; and the Musalmans are mostly Bohoras. The Marwar Vanis live in Ravivar and are the largest traders. They do business both wholesale and retail and almost exclusively in the handmade cloth. They supply the rich. The Shimpis mostly live in Budhvar and chiefly sell bodicecloths. They also deal in poorer kinds of handwoven cloth. They supply the middle and low class demand. The Brahmans and Marathas, who mostly deal in handmade cloth, have their shops in Ravivar. The Bohoras live in the Bohoriali in Ravivar, and sell all kinds of European piece-goods as well as the produce of the Bombay mills. *Kinkhabs* or embroidered silks and coloured China and European silks are also sold by Bohoras. All the leading cloth merchants of Poona are men of capital and do a large business. Minor dealers work with borrowed capital. The profits vary greatly according to individual dealings, perhaps from £1 to £40 (Rs. 10-400) a month. Their women mind the house and their boys learn to read and write.

Shoe Sellers.

Shoe Sellers are all Chambers. Details are given under the head of Shoemakers. There are also some Pardeshi shoe sellers.

Ornament Sellers.

Ornament Sellers numbering 32S are mostly Gujarat Vanis, Sonars, Jingars, Kasars, Manyars, Lakheris, and a few Brahmans. Bralimans, Gujarat Vanis, and Sonars sell smaller silver and gold ornaments and have about fifty shops in Motichauk street in Aditvar. They are not men of capital, but their business yields them a comfortable living. Their women mind the house and their boys learn to read and write. Jingars make and sell queensmetal ornaments for the lower classes. Kasars and Manyars sell glass bangles and Lakheris make and sell lac bracelets and mostly live in the Kasba, Rastia, and Budhvar wards. The rich bangle sellers import China bangles from Bombay and sell them to retail sellers. They are well-to-do, their wives mind the house and their boys learn to read and write. Of the retail sellers, some have shops and some hawk bangles in streets. They are fairly off. Besides minding the house their women sometimes hawk bangles and their boys often learn to read and write. The Kasars are Jains and Marathas, and the Manyars are Musalmans of the Hanafi school. Lakheris, who seem to have come from Marwar during the time of the Peshwas, dress and speak like Marwar Vanis. They prepare lac bracelets for wholesale dealers by whom they are paid \(^3\)4d. (\(^1\)2 a.) the hundred. Some of them make bracelets on their own account and sell them at 6d. to $10\frac{1}{2}d$. (4-7 as.) the hundred. Their women and their children after the age of fifteen help in the work. The more expensive jewelry, pearls, diamonds, and other precious stones are sold by individual jewellers who have not regular shops but whose houses are well known.

Animal Sellers.

Animal Sellers numbering 110 mostly live in the Bhavani Sadashiv and Vetal wards. The Poona cattle market is held in open ground at Bhambhurda village close to the west of the city. It is held on Wednesday and Sunday afternoons. Bullocks, buffaloes, cows, ponies, sheep, and goats are the animals dealt in. Although the chief, Dhangars are not the only, class who deal in cattle, neighbouring villagers and all men who have to sell their animals bring them to the markets.

Furniture sellers.

Except Jains, Kasars, and a few Brahmans and Sonars who sell but do not make brass and copper vessels, almost all the sellers of articles of native furniture, earthen pots, boxes, bedsteads, stools, carpets, and mats are makers as well as sellers. The brass and copper vessel sellers numbering 263 mostly live in the Ravivar, Ganj, Vetal, and Shukravar wards, and most of them have their shops in Ravivar. They buy from Tambats or employ Tambats to work for them. They are a shrewd, hardworking, and a prosperous class. Their wives do nothing but house work and their boys go to school. On Sundays and Wednesdays a market is held in the afternoon to the south and east of the Shanvar palace at which old furniture, books, pictures, clothes, lamps, glassware, and lumber are sold by

dealers from the cantonment bazar. Besides these markets in the Bhavani ward a number of Marwar Vanis deal in old furniture and lumber, and are comfortably off.

Miscellaneous Sellers.

The chief miscellaneous sellers are Bohoras who chiefly deal in hardware, stationery, and haberdashery, a few making and selling tin lanterns and tinpots and iron oil and water buckets. They have their shops in Ravivar. They earn £20 to £50 (Rs. 200 -500) a year and are comfortably off. They are neat, clean, hardworking, thrifty, and honest. Their wives mind the house and their boys go to school.

Husbandmen.

Husbandmen numbering 1636 are chiefly Kunbis and Malis, living mostly in the Kasba, Shukravar, Ganj, Mangalvar, Sadashiv, Shanvar, and Bhavani wards. Some till their own lands and some rent lands mostly belonging to Brahman landholders, They are sober and hardworking. Their women and children work with them in their fields.

Pulse Sellers

Pulse Sellers or *dalvalas* numbering 118 belong to two castes Marathas and Pardeshis. Maratha pulse-sellers numbering sixty-seven do not differ from Maratha grain-dealers. Pardeshi pulse-sellers numbering fifty-one came from Upper India to Aurangabad and from Aurangabad to Poona about sixty years ago. They buy pulse grain from wholesale pulse-grain dealers, prepare pulse, and sell it to retail dealers or private customers. They have no capital, and their own and have to borrow on the security of their stock. They spend as much as they earn. Their wives help them and their boys sometimes go to school.

Grain Roasters.

Grain Roasters numbering 223 mostly live in the Ravivar, Ganj, Bhavani, Vetal, Kasba, and Shukravar wards. They are chiefly Maratha and Pardeshi Bhadbhunjas. The Maratha Bhadbhunjas do not differ from Maratha husbandmen in appearance customs or way of living. The Pardeshi Bhadbhunjas are said to have come fifty years ago from Cawnpur, Lucknow, and Mathura in Upper India. They are proverbially dirty but hardworking. They buy the grain and pulse from grain-dealers, and after parching it sell it at a profit of twelve to twenty per cent. Their women and their children from the age of ten or twelve help them in their calling, sitting in the shop and soaking and drying grain. In spite of their help a grain-roaster's family does not earn more than £1 to £1 10s. (Rs. 10-15) a month. They send their boys to school. Competition among the different classes of grain roasters is said to be reducing their earnings.

Flower Sellers.

Flower Sellers or Phulmalis numbering eighty-nine have their shops in the Budhvar, Ravivar, and Vetal *peths* and in the Moti-chauk. Garden-owners let out beds of flower plants to Phulmalis. Women and children gather flowers and carry them in large shallow baskets to their shops where men string them into garlands and bouquets. Almost every Phulmali undertakes to supply certain families with flowers for house-god worship for which he is paid 6d. to 1s. (4-8 as.) a month. The flowers for house-god worship are of different kinds, are tied in small bundles in plantain leaves, and are taken to the houses of the customers in the evening by their women. The shop is arranged on wooden boards covered with a wet cloth. The Phulmali squats in the middle with an earthen water-pot on his left hand, baskets of flowers on the right hand, and ready-made garlands and nosegays arranged on wet cloth or hung in his front. The shop is about six feet wide and six feet long, and opens to the road. The flowers that remain after the day's sale are sold to perfume sellers who extract scents from them. The flower supply of Poona is so great that large quantities are sent to Bombay and as many as 1000 garlands and 3000 nosegays can be had at a few hours' notice.

Sweetmeat Sellers.

Sweetmeat Sellers numbering 234 mostly live in the Ravivar, Budhvar, Kasba, Shanvar, Vetal, Nana, Ganesh, and Shukravar wards. They are divided into Ahirs, Jains, Lingayats, Marathas, Marwar Vanis, Pardeshis, Shimpis, and Telis. The well-to-do have their shops and the poor hawk sweetmeats in streets. Their women help them in their work and their boys learn to read and write. They are hardworking, thrifty, and sober.

Oil Makers.

Oil Makers numbering 221 chiefly live in the Mangalvar, Ravivar, Sadashiv, Nana, and Vetal wards. They are mostly Marathas and Lingayats. The Maratha oil-makers are the same as cultivating Marathas and look and live like them, though they do not marry with them. The Lingayat oil-makers do not differ from other oilmen. They are said not to work on Mondays. They are hardworking, thrifty, sober, and strongly made, and their women are proverbially fair and well-featured. They extract oil from cocoanut, sesame, *Karla* Verbesina sativa, *kardai* Carthamus tinctorius, *undi* or oilnuts, groundnuts, and hemp seed. Their women help them and their boys from the age of twelve or fourteen. They earn 3d. to 1s. (2-8 as.). They suffer from the competition of kerosine and other imported oils and are falling to the position of labourers. Some of them send their boys to school.

Butchers.

Butchers numbering 131 mostly live in the Shukravar Rastia, Ganesh, Ravivar, Bhavani, and Nana wards. They are chiefly Musalmans called Sultani Lads. They are descended from local Hindu mutton butchers and ascribe their conversion to Haidar Ali of Maisur (1763 - 1782). They are hardworking thrifty and sober and some are rich, and spend much on marriage and other ceremonies They marry among themselves and have a separate class union under a headman called the *chaudhari*. They have no connection with other Musalmans and eschew beef. They hold aloof from beef-butchers who are

only found in small numbers in the cantonment of Poona. They offer vows to Brahmanic gods and hold the usual Brahmanic festivals. The only specially Musalman rite is circumcision. None but the old women who sell the smaller pieces of mutton help the men in their work. They do not send their boys to school and take to no new pursuit. Except in Khatikali or Butcher's Bow near Subhansha in Ravivar ward, which is the oldest mutton market in the city and where they have their private stalls or sell in front rooms of their dwellings, butchers sell in one of the remaining five markets in Kasba, Vetal, Nana, and Bhavani wards and in Durjansing's Paga.

Fishermen.

Fishermen numbering 211 mostly live in the Kasba, Mangalvar, and Narayan wards. They are chiefly Bhois, of three divisions Kadus, Kamathis, and Marathas, of whom Kadus and Marathas eat together but do not intermarry. They are hardworking and thrifty but dirty, and the women are quarrelsome. A few send their boys to school, but as a class they are poor and show no signs of rising. The three fish markets are to the south of the Shanvar palace and in Aditvar and Vetal wards. In the open ground to the south of the Shanvar palace stalls are kept daily by Bhoi women for the sale of dry Konkan fish. The Aditvar ward fish market is chiefly used for the sale of salt fish, with fresh fish in the evening. In the Vetal ward fish market fresh fish and a little dry fish are offered in an open plot. Women of the Bhoi caste are the chief fish-sellers and Kunbis from the neighbouring villages are the chief consumers.

Stonecutters.

Stonecutters numbering seventy-six live in small numbers in all wards except in the Rastia and Muzafarjang, varying from one in Nyahal ward to eleven in Shukravar. They are Kamathis, Marathas, and Telangis; they do not eat together nor do they intermarry.

They are clean, hardworking, thrifty, and orderly. They are stone masons and carvers and make excellent images of gods and of animals, handmills, grindstones, and rolling-pins. As foremen or *mestris* they draw £1 10s. to £2 (Rs. 15 - 20) a month, and as day-workers 6d. to 1s. (4-8 as.). Their women do not help in their work, but boys of fifteen to twenty earn 14s. to 16s. (Rs. 7-8) a month. Some of them send their boys to school and on the whole they are a steady class.

Potters and Brick and Tile Makers.

Potters and Brick and Tile Makers numbering 291 live mostly in the Kasha, Nana, Narayan, Vetal, Ravivar, Bhavani, and Ghorpade wards. They are divided into Maratha and Pardeshi Kumbhars. Their houses can be known by pieces of broken jars, heaps of ashes, and the wheel. They make water vessels, grain jars, children's toys, bricks and tiles. Bricks are sold at 10s. to 18s. (Rs. 5-9) and tiles at 6s. to 10s. (Rs. 3-5) the thousand. Their women sell the smaller vessels and children's toys. They are hardworking, quiet, and well behaved. They do not send their boys to school and are poor.

Carpenters.

Carpenters numbering 598 mostly live in the Shukravar, Ravivar, Sadashiv, Kasba, Nana, Rastia, Somvar, Bhavani, and Ganesh wards. They are chiefly Badhais who are said to have come upwards of a hundred years ago from Jalna in the Nizam's country and from Burhanpur in West Berar. They are mostly Pardeshis from Upper India, and look like Pardeshis and speak Hindustani both at home and abroad. They are carpenters, and make boxes and cots and repair cupboards tables and chairs earning 1s. to 1s. 6d. (8-12 as.) a day. In Ravivar ward a street is called Badhaiali after them where they have their shops in which they sell boxes cots and children's toys.

Blacksmiths.

Blacksmiths numbering 358 mostly live in the Ravivar, Nana, Shukravar, Sadashiv, Kasba, and Bhavani wards. They are chiefly Maratha and Panchal Lohars and a few Ghisadis. Maratha Lohars say that they came, during the Peshwas' supremacy, from Ahmadnagar, Bombay, Khandesh, and Sholapur. They dress and look like Marathas. They are hardworking but thriftless, quarrelsome, dirty, and drunken. Their women do nothing but house work and their boys begin to learn at twelve; they are not helped by their women. The boy-workers are paid 1½d. to 6d. (1-4 as.) a day. The Panchal Lohars do not differ from Pannchal coppersmiths in food, drink, dress, and customs. They are hardworking but fond of liquor and not very thrifty. Ghisadis make horse-shoes and field tools, but are chiefly employed as tinkers. As a class they are hardworking, quarrelsome, dirty, thriftless, and fond of drink. Besides the blacksmith shops Poona city has twenty-seven iron pot factories in Aditwar ward, ten of which belong to Kunbis and ten to Malis, four to Telis or oilmen, and three to Bohoras. The workmen are chiefly Kunbis and Musalmans and a few Brahmans. The workers make little more than a living, most of the profits going to the dealers. Their women and children do not help the men in their work.

Bricklayers.

Bricklayers numbering 494 mostly live in the Budhvar, Nana, Sadashiv, Kasba, Shanvar, and Vetal wards. They are Gujarati, Jat, Kamathi, Lingayat, Pardeshi, and Musalman Gavandis. They are hardworking, even-tempered, sober, and thrifty. They are masons and contractors and the Hindu Gavandis also make clay images of Ganpati and other clay figures. Few send their boys to school. Some of them are rich and the rest are well-to-do.

Lime Burner.

Lime Burners numbering thirty-three mostly live in Shukravar ward. They are chiefly Lonaris who do not differ from Marathas in appearance, language, dwelling, food, or dress. They buy lime nodules from the neighbouring villages of Hadapsar, Mahammadvadi, Phursangi, and Vadki at Is. 6d. to 2s. (Re.¾ -1) a cart. They burn the nodules, mixing them with charcoal and cowdung cakes in circular brick kilns which take three to six days to burn. As the work requires strength their boys do not help them till

they are sixteen. They send their boys to school. They complain that their calling is failing from the competition of well-to-do Parsis and Brahmans and of Mhars and Mangs.

Thatchers.

Thatchers numbering 118 mostly live in the Nana, Shukravar Muzafarjang, and Ganesh wards. They are chiefly Rajputs from Upper India, who came about a hundred and fifty years ago in search of work. The men dress like Marathas and the women wear a bodice a petticoat and a robe rolled round the petticoat with one end drawn over the head. They are quiet, hardworking, and orderly. They make thatch of *sag* or teak leaves hay and bamboos. The women sell firewood and cowdung cakes. Their calling is declining as Government do not allow thatched roofs to remain during the dry season. They do not send their boys to school and are a poor class.

Painters.

Painters numbering twenty-nine mostly live in the Ravivar Shukravar, and Budhvar wards. They are chiefly Jingars, who do not differ in food, drink, or dress and living from other Jingars.

Weavers.

Weavers are chiefly of two classes, cotton weavers and silk weavers. Poona city has about 500 cotton hand-looms, of which 450 belong to Hindus 300 of them Koshtis and 150 Salis, and the remaining fifty Musalmans. Most Hindus weave women's robes and Musalmans weave turbans. Cotton hand-loom weavers are chiefly found in the Somvar, Vetal, Bhavani, Rastia, and Shukravar wards. Hindu weavers are said to have come about three generations ago from Paithan, Yeola, Sholapur, Indapur, and Narayan Peth in the Nizam's country. The Musalman weavers came to Poona only four or five years ago from Malegaon in Nasik where they form a large colony. All live in one or two-storeyed houses, fifteen to twenty of which belong to the occupants, and the rest are hired. The robes woven by the Hindus and the turbans woven by the Musalmans are generally coarse and cheap. The Hindus work from seven to eleven and again from one to sunset; the Musalmans work almost the whole day except a short time for their meals which they generally cook in the same shed or room in which they weave. Both Hindu and Musalman cotton-weavers get great help from their women in reeling, dyeing, warping, and sizing. Some Hindu women even weave. With all this help cotton-weavers barely make a liveing. The average daily earnings of a cotton-weaver's family are said ti range from 6d. to $7\frac{1}{2}d$. (4-5 as.), and during the rains they are often short of work. All the yarn used in the Poona hand-loom is steam-made partly from the Bombay mills and partly from Europe. To buy the yarn most weavers have to borrow at two per cent a month. The local demand, especially during the marriage season will probably keep up hand-loom cotton-weaving for some time Still it seems probable that in a city where the price of grain and the cost of living is high compared with most parts of the Deccan the handloom weavers of robes will be driven out of a living by steam-made fabrics. Hand-loom

turban-weaving will probably last longer, as, so far, it has been free from machine competition.

Silk-weaving in Poona city is flourishing. Of 700 to 800 looms nearly two-thirds are owned by Momin and Julaha Musalmans who have settled at Mominpura in the Ganj ward. The Hindu silk workers are found in Kachi Ali and near Someshvar. Musalman silk workers belong to two sections Momins proper and Julahas, and the Hindu workers to three sections Khatris, Koshtis, and Salis. According to their own account most of the Musalmans came about three generations ago from Haidarabad, Dharwar, Narayan Peth, and Gulmatkal in the Nizam's country, and the Hindu workers, according to their own account, came from Paithan and Yeola three or four generations ago. As a class both Hindus and Musalmans are mild hardworking and sober, the Hindus being more hardworking and thriftier than the Musalmans. The demand for silk is growing and the workers are well-to-do. Their women and children over ten help the men in sorting, reeling, and sizing. Since the 1876-77 famine about twenty Kamathi Koshti families have come from Narayan Peth in the Nizam's country and settled at Poona. They own about 100 silk looms and are hardworking and more successful than the local workers. The only silk used is China silk. The Poona silk workers either borrow money from Shimpi and Marwar Vani silk dealers and buy silk yarn and gold thread, or they work as labourers, receiving the materials from Shimpi and Marwar Vani silk dealers and being paid by the piece. When money is advanced the silk dealers do not charge interest but get 11/4 per cent on the sale proceeds of the fabrics.

Gold and Silver Thread Makers.

Gold and Silver Thread Makers mostly live in the Shukravar and Aditvar wards. They are chiefly Lad Sonars, Konkani Sonars, Khandesh Sonars, Adher Sonars, and Vaishya Sonars, Lads proper, Marathas, and Pardeshis. About twenty-five families are Patvekaris or bar-makers, seventy-eight are Tarkasas or thread-drawers, and seventy to eighty families are Chapdyas or wire-beaters. There are also about 200 Valnars or threadtwisters mostly women. All Patvekaris or bar-makers are Sonars. Of the thread-makers or Tarkasas, the thread-beaters or Chapdyas and the thread-twisters or Valnars most are Ladds. The name Lad seems to point to a South Gujarat origin. But according to their own account they came to Poona from Aurangabad and Paithan in the Nizam's country. The Lads say their forefathers worshipped Parasnath and Balaji and afterwards, they do not know how long ago, they forsook the Jain faith for the worship of the goddess of Tuljapur. The rest are Kunbis and other classes, including a few Deshasth Brahmans, who took to thread-making because it was flourishing. They are a contented and hardworking class. They live generally in one-storeyed houses, some their own others hired. The different divisions of workers dress like other men of their own castes. As a class they are well-to-do. Except in twisting, gold and silver thread-makers get no help from their women nor from their children till they are over twelve. Most of the gold and silver used in making the thread is brought to Poona from Bombay by Marwar Vani and Shimpi dealers. There are about a hundred and fifty tape weavers. They are chiefly Ravals who have come from Mohol and Sholapur. They are permanently settled in Poona and visit their homes every year generally during the rains. In Poona they live in a part of the Ganj

ward which is known as the Raval quarter. They look like Lingayats and worship Shiv but do not wear the *ling*. Tape-weaving requires little skill. Most weavers are in debt to the tape-dealers, and they keep hardly any holidays. Besides them as many as 150 Musalman women weave narrow tape in their leisure hours earning a shilling or two a month.

Tailors.

Tailors numbering 481 mostly live in the Shukravar, Kasba, Budhvar, Ravivar, and Ganj wards. They are chiefly Namdev Shimpis, Konkani Shimpis, Jain Shimpis, and Pancham Shimpis who do not eat together nor intermarry. Most of the Namdev Shimpis dress like Brahmans and their women are proverbially handsome. They are hardworking, quiet, sober, and hospitable. They sew the clothes of their customers and also keep ready-made clothes in stock. They are helped by their women and by their children of fifteen and over. They send their boys to school but only for a short time. The use of sewing machines has much reduced the demand for their work; still as a class they are fairly off.

Leather Workers.

Leather Workers numbering 594 mostly live in the Nana. Ghorpade, Shukravar, Ganj, Bhavani, and Ravivar wards. Except a few Jingars or saddlers who sell horse-gear in Aditvar, they are chiefly Maratha Chambhars and Pardeshi Mochis. Maratha Chambhars live in one-storeyed houses with mud walls and tiled roofs. They are hardworking, dirty, and drunken. They work in leather, cut and dye skins, and make shoes, sandals, and water-bags. They sell shoes at 1s. to 3s. (Rs. $\frac{1}{2}$ - $\frac{1}{2}$) and mend shoes at $\frac{3}{8}d$. to 3d. ($\frac{1}{2}$ -2 as.) a pair. Their women help them. Some of them send their boys to school till they are about twelve when they become useful is their calling. They complain that they are growing poor because people are taking to wearing English-shaped boots and shoes still they are a steady if not a rising class. Pardeshi Mochis from the North-West Provinces and Oudh mostly live in Nana's ward. They make boots for the European and Native troops and for the residents of Poona cantonment which borders on Nana's ward, They are hardworking, dirty, and drunken but hospitable. They make and sell boots with elastic sides at 3s. to 10s. (Rs.1½-5) the pair and shoes at 1s. 6d. to 3s. (Rs. ¾-1½) the pair. They buy hides from Dhors. They earn 6d. to 1s. (4-8 as.) a day. Their women help by twisting thread. Their boys are skilled workers at fifteen or sixteen and earn 3d. to $4\frac{1}{2}d$. (2-3 as.). They are said to be suffering from the importation of European shoes which are better and stronger than those they make.

Skin Dyers.

Skin Dyers numbering 124 mostly live in the Ravivar, Ganj, Nana and Bhavani wards. They are chiefly Hindu Dhors and Musalman Saltankars. The Hindu Dhors generally live in one-storeyed dirty houses and are known by their red fingers stained by the dye they use in making leather. As a class Dhors are dirty, hardworking orderly, thrifty, goodnatured, and hospitable. Their principal and hereditary calling is tanning hides which they buy from Mhars. The women help the men in their work. In spite of good earning most of

them are in debt. Some send their boys to school where they remain till they are able to read and write. The Musalmans, who are said to have been descended from local Hindus of the Chambhar caste, trace their conversion to Aurangzeb. Both men and women are dirty and untidy and their women help the men in their work. They are hardworking and thrifty, and some of them are well-to-do and able to save. They buy goats' skins from butchers and dye them. Of late years rich hide and skin merchants, Mehmans from Bombay and Labhes from Bombay and Madras, through agents spread all over the country, buy and carry to Bombay the bulk of the local outturn of skins. This rivalry has ruined the Saltankars' calling, and most have given up their former calling. They have taken to making the coarse felt-like woollen pads which are used as saddle pads and for packing ice. They eschew beef and hold aloof from regular Musalmans. They do not send their boys to school.

Ornament Makers.

Ornament Makers numbering 683 mostly live in the Shukravar, Ravivar, Sadashiv, Kasba, Shanvar, and Ganesh wards. They are chiefly Deshi Sonars, Konkani Sonars, Ahir Sonars, and Panchals. The Deshi and Panchal Sonars are old settlers. The Konkani Sonars or Daivadnyas came from the Konkan and claim to be Brahmans. The Ahirs according to their own account came from Nasik about a hundred and fifty to two hundred years ago. All Sonars dress like Brahmans. They are clean, hardworking, even-tempered, and orderly, but have rather a bad name for not returning things ordered from them at the proper time. They are often accused of mixing gold and silver given to them for making ornaments. They make and mend gold and silver ornaments, set gems, and work in precious stones. They work to order and make 10s. to £2 (Rs. 5 - 20) a month. Their wives do nothing but house-work and their boys begin to help after ten or twelve and are skilled workmen at fifteen. They send their boys to school till they are for to twelve and have learnt a little reading, writing, and counting. As a class they are well-to-do.

Brass and Copper Workers.

Brass and Copper Workers numbering 2320 mostly live in the Kasba, Shukravar, Vetal, Ghorpade, Budhvar, and Eastia wards. This number includes 810 Tambats or makers of large articles, 500 Jingars or makers of small articles, fifty Otaris or casters, and 960 Kasars or brasiers. The hereditary copper brass and bellmetal workers of Poona, the Tambats, Jingars, Otaris, and Kasars, are quiet easygoing people. All speak incorrect Marathi and live in one-storeyed houses of which seven belong to the Tambats, fifty or sixty to the Jingars, and thirty to the Otaris. The Kasars and Tambats dress like Brahmans and the Jingars and Otaris like Marathas. As the demand for brassware is growing, no Tambats, Jingars, Otaris, or Kasars have of late given up their hereditary craft. Within the last fifteen years their numbers have been more than doubled by local Maratha Kunbis whom the high profits of brass-working have drawn from the fields and the labour market, but who so far confine themselves to the rough parts of the work.

Basket Makers.

Basket Makers numbering 304 mostly live in the Nana, Bhavani, Ravivar, Ganesh, Ghorpade, Mangalvar, and Kasba wards. They are chiefly Buruds who say they came from Aurangabad, Ahmadnagar and Satara about two hundred years ago. They are divided into Jats, Kanadis, Lingayats, Marathas, Parvaris, and Tailangs who do not eat together nor intermarry. They look like Maratha husbandmen They are hardworking and orderly but fond of drink. They make baskets, mats, fans, cane-chairs and sun-screens, the women doing as much work as the men. Their average earnings are 10s. to 14s (Rs. 5 - 7) a month, and most families have at least two or three wage-earning members. They live in fair comfort but are poor They say their craft is falling as baskets are now made of iron instead of bamboo. They do not send their boys to school and do not take to new pursuits.

Barbers.

Barbers numbering 580 live in all the wards of Poona city, their number varying from seven in Rastia ward to ninety-four in Kasba ward. They are Nhavis who are divided into Gangatirkar, Ghati Gujarati, Khandeshi, Kunbi, Madrasi, Marwari, Pardeshi, Tailang Waideshi, and Vajantri Nhavis. They are a quiet orderly people hardworking but thriftless, showy, and fond of talk and gossip Besides being barbers they bleed and supply torches and their women act as midwives. At marriages they hold umbrellas over the heads of the bride and bridegroom. Besides this Gangatirkar, Kunbi, and Wajantri Nhavis act as musicians at marriages and other ceremonies and Khandeshi Nhavis act as torchbearers. The rates charged by barbers of the different subdivisions vary little. A barber makes 14s. to £2 (Rs. 7-20) a month. Their women do not help except by acting as midwives and attending some rich women. They send their boys to school for a short time. They are steady and well-to-do, but none have risen to any high position.

Washermen.

Washermen numbering 479 mostly live in the Sadashiv, Shukravar, Kasba, Ravivar, Narayan, and Shanvar wards. They are Marathi Pardeshi and Kamathi Parits. They wash clothes. They are helped by their women and children in collecting clothes, drying them and giving them back to their owners. They do not send their children to school and are a steady class.

Labourers.

Labourers numbering 544 live in all the wards of the city except Muzafarjang. They are chiefly Bhandaris, Chhaparbands Kamathis, Kalals, Lodhis, Rajputs, and Raddis. When other Work fails the destitute of almost all classes take to labour.

Field Worker.

Field Workers numbering 569 mostly live in the Bhavani Shukravar, Sadashiv, and Nana wards. They are chiefly Kunbis Malis, and a few Mhars and Ramoshis. Some of them are yearly servants and some are paid every day.

Carriers.

Carriers numbering 483 mostly live in the Bhavani, Nana, Ganesh Budhvar, and Sadashiv wards and in small numbers in almost all wards. Carriers of bundles are chiefly Kunbis Telis and Musalman There is a special class of carriers known as *hamals*, who work in gangs, storing grain and unloading carts. They are paid a lump sum and every evening divide the proceeds. There is a considerable demand for labour on the railway and public roads. The workers are chiefly Mhars, Bhils, Kolis, Musalmans, and a few Kunbis.

Housebuilding causes a considerable demand for unskilled labour chiefly in making cement and helping the bricklayer and mason. Both men and women work as housebuilders. Every year, before the rains set in, tile-turning employs a large number of Kunbis and Marathas.

Players.

Players or Vajantris include Guravs, Nhavis, Ghadshis, and Holars of the Mang caste who play on a flute and a drum held in one hand; *Sarangivalas* or harpers and *Tablevalas* or drum-beaters who play for dancing girls, and, if Brahmans, perform in temples when the religious services known as *kirtans* are going on; and *tamashevalas*, Marathas and Brahmans who play the drum called *daphtamburi* or lute, and *tals* or cymbals. The only actors are the *Bahurupis*.

Animal Trainers

Of animal trainers there are the Garodis who go about with serpents, and the Nandivalas who have performing or misshapen bullocks.

Athletes,

Of Athletes, there are Kolhatis or acrobats, and Gopals who wrestle.

Depressed Classes.

The depressed classes include Chambhars, Dhors, Mangs, and Mhars. They live in dirty huts outside of the town. They are idle, dishonest, given to drinking, thieving, and telling lies. Both men and women are of loose morals and husbands and wives are changed at will. Of Mhars some are in the native army, some are domestic servants to Europeans, some are day-labourers, and some are sweepers. Labourers and scavengers begging for remains of dishes served at dinner and for a morsel of food, will remain crying at doors for hours together. Chambhars make shoes, Dhors tan hides, and Mangs make ropes and brooms. They live in abject poverty and have scarcely any bedding beyond a blanket. They go almost naked and have no metal pots in their houses. Their women work as day-labourers and do house work. They cannot read and write and seldom send their boys to the schools which Government have opened for them. To create a desire for learning in them small money and book presents are often made.

Religious Beggars.

Of 1798 beggars of five classes, 527 are Bairagis, 956 Gosavis, 297 Jangams, 15 Nanakshais, and 3 Kanphatas. Of these Gosavis are the most important class of beggars. They mostly live in Gosavipura, a street called after them where they own large mansions which they call *maths* or religious houses. They are beggars merely in name, many of them being traders and a few bankers. Except Sonars or goldsmiths, Sutars or carpenters, and other artisan classes and classes below Marathas, they recruit freely from all castes. They admit freely their children by their mistresses and children vowed to be Gosavis. They are divided into gharbaris or householders and nishprahis or celebates who eat together. Most of them are celebates in name and many of them have mistresses. As a class Poona Gosavis are clean, neat, hospitable, and orderly. Formerly Gosavis used to travel in armed bands pretending to seek charity, but really to levy contributions, and where they were Unsuccessfully resisted, they plundered and committed great enormities. Later on (1789) they were first employed by Mahadji Sindia in his army and afterwards by other great Maratha chiefs. [Grant Duff's Marathis, 7-8, 478-479.] Under the Peshwas they were great jewellers and shawl merchants and traded in rarities. In 1832 Jacquemont described them as bankers and traders all with a religious character. Though vowed to celebacy they were known to have *zananas* where their children were killed at their birth. They had most of the riches of Poona in their hands. They came chiefly from Marwar and Mewar and had adopted children of those countries. They had solid brick and stone houses pierced with a few narrow openings. [Voyage Dans Made, III 573,] Though all call themselves beggars and some live by begging, many live by trade and service. Many of them are moneylenders, and, though not so rich as before, are in easy circumstances and most of them send their boys to school.

Trade.

The trade of Poona has greatly increased since 1858, when it became a railway station. According to the 1881-1884 municipal; returns imports of Poona city for the three years averaged 174,497 tons (4,885,922 Bengal *mans*) valued at £1,259,782 (Rs. 1,25,97,820) and the exports to 20,452 tons (572,642 Bengal mans) valued at £334,645 (Rs. 33,46,450). The following statement gives the chief details:

| Poona | City I | lmports, | 1881 | 1884. |
|-------|--------|----------|------|-------|
|-------|--------|----------|------|-------|

| ARTICLES. | 1881-82. | | 1882 | 2-83. | 1883-84. | | |
|---------------|----------|--------|-------------|----------|----------|--------|--|
| | Tons. £. | | Tons. | Tons. £. | | £. | |
| Grain | | | | | | | |
| Gram | 4614 | 22,609 | 4945 | 27,691 | 4447 | 23,347 | |
| Indian Millet | 3927 | 16,494 | 3680 15,456 | | 3173 | 13,327 | |
| Spiked Millet | 13,93 | 68,280 | 15,68 | 87,822 | 15,56 | 76,245 | |

| | 6 | | 2 | | 0 | |
|------------------------------------|------------|-------------|------------|-------------|------------|-------------|
| Rice | 8859 | 62,014 | 10,02 | 84,190 | 8668 | 78,882 |
| Wheat | 8130 | 56,910 | 8591 | 72,162 | 8560 | 59.919 |
| Other Grains | 6142 | 27,844 | 6694 | 29,200 | 4901 | 28,147 |
| Total | 45,60 7 | 254,16 1 | 49,51 5 | 316,52 1 | 45,30 9 | 279,86 7 |
| Groceries. | | | • | | | |
| Almonds | 23 | 715 | 387 | 10,824 | 39 | 1013 |
| Arrowroot | 4 | 100 | 32 | 707 | 2 | 49 |
| Betelnuts | 168 | 3292 | 198 | 6103 | 290 | 9732 |
| Clarified Butter | 745 | 56,314 | 775 | 60,405 | 873 | 61,110 |
| Coffee | 14 | 737 | 36 | 6006 | 11 | 614 |
| Cocoa- kernels | 415 | 8133 | 381 | 10,653 | 419 | 8507 |
| Cocoanuts | 456 | 3834 | 507 | 4259 | 527 | 4426 |
| Groundnuts husked & unhusked | 1879 | 12,439 | 2143 | 13,225 | 2255 | 16,236 |
| Raw Sugar | 5241 | 80,715 | 5135 | 77,249 | 5436 | 76,107 |
| Sugar | 1005 | 30,939 | 1499 | 48,297 | 1333 | 41,050 |
| Tobacco | 847 | 16,588 | 873 | 17,111 | 822 | 16,120 |
| Other Groceries | 175 | 8241 | 167 | 4051 | 192 | 6220 |
| Total | 10,97 2 | 222,04 7 | 12,13 | 258,89 0 | 12,19 9 | 241,18 4 |
| Miscellaneous. | | | | | | |
| Betel Leaves | 2010 | 28,133 | 2234 | 31,282 | 2235 | 37,549 |
| Dry Fish | 587 | 6571 | 697 | 7810 | 577 | 6466 |
| Fruit | 3617 | 10,128 | 3307 | 9259 | 4966 | 13,905 |
| Vegetables. Green. | 10,14 0 | 17,745 | 14,14 5 | 24,753 | 13,24 0 | 23,170 |
| Sundries | 599 | 1300 | 319 | 657 | 389 | 837 |

| Total | 16,95 3 | 63,877 | 20,70 | 73,761 | 21,40 7 | 81,927 |
|---|------------|--------|------------|--------|------------|--------|
| Food for Animals Fodder | 33,36 8 | 23,357 | 29,06 7 | 20,347 | 29,74 4 | 20,820 |
| Grain Husk, Oilcake and Cotton Seed | 998 | 2499 | 1198 | 3284 | 1312 | 3336 |
| Total | 34,36 6 | 25,856 | 30,26 5 | 23,631 | 31,05 6 | 24,156 |

Poona City Imports, 1881-1884. continue.

| ARTICLES. | TOT | AL. | AVERAGE. | | |
|------------------|---------|-------------|----------|---------|--|
| | Tons | £. | Tons. | £. | |
| Grain | | | | | |
| Gram | 14,006 | 73,647 | 4669 | 24,549 | |
| Indian Millet | 10,780 | 46,277 | 3593 | 15,092 | |
| Spiked Millet | 45,177 | 232,34 7 | 15,059 | 77,449 | |
| Rice | 27,650 | 225,08 6 | 9183 | 75,029 | |
| Wheat | 25,281 | 188,99 1 | 8428 | 62,997 | |
| Other Grains | 17,737 | 85,191 | 5912 | 28,397 | |
| Total | 140,531 | 850,53 9 | 46,844 | 283,513 | |
| Groceries. | | | | | |
| Almonds | 419 | 12,552 | 149 | 4184 | |
| Arrowroot | 38 | 856 | 13 | 285 | |
| Betelnuts | 656 | 19,127 | 218 | 6375 | |
| Clarified Butter | 2393 | 177,82 9 | 798 | 59,276 | |
| Coffee | 61 | 7357 | 20 | 2452 | |

| Cocoa-kernels | 1215 | 27,293 | 405 | 9098 |
|--|--------|-------------|--------|--------|
| Cocoanuts | 1490 | 12,519 | 497 | 4173 |
| Groundnuts husked & unhusked | 6277 | 41,900 | 2092 | 13,967 |
| Raw Sugar | 15,812 | 234,07 | 5270 | 78,024 |
| Sugar | 3837 | 120,28 6 | 1279 | 40,095 |
| Tobacco | 2542 | 49,819 | 847 | 16606 |
| Other Groceries | 534 | 18,512 | 178 | 6170 |
| Total | 35,304 | 722,12 1 | 11,768 | 240705 |
| Miscellaneous. | | | | |
| Betel Leaves | 6479 | 96,964 | 2160 | 32321 |
| Dry Fish | 1861 | 20,847 | 620 | 6949 |
| Fruit | 11,890 | 33,292 | 3963 | 11097 |
| Vegetables. Green. | 37,525 | 65,668 | 12,508 | 21890 |
| Sundries | 1307 | 2794 | 436 | 931 |
| Total | 59,062 | 219,56 5 | 19,687 | 73188 |
| Food for Animals Fodder | 92,179 | 64,524 | 30,726 | 21,508 |
| Grain Husk, Oilcake and Cotton Seed | 3508 | 9119 | 1169 | 3040 |
| Total | 95,687 | 75,643 | 31,895 | 24,548 |

Poona City Imports, 1881-1884—continued.

| ARTICLES. | 1881-82. | | 188 | 22-83. | 1883-84. | | |
|-----------|----------|--------|-----------|--------|-------------|--------|--|
| Fuel. | Tons. | £ | £ Tons. £ | | Tons. | £ | |
| Candles | 9 | 786 | 71 5991 | | 4 | 300 | |
| Firewood | 31,235 | 32,796 | 27,992 | 29,392 | 29,570 | 41,398 | |
| Oil | 1254 | 31.610 | 1437 | 40,218 | 1398 35,237 | | |

| Oil Seeds | 803 | 4837 | 789 | 4762 | 951 | 5804 |
|--|--------|---------|--------|---------|--------|---------|
| Soap | 26 | 431 | 26 | 440 | 20 | 339 |
| Soapnuts | 45 | 508 | 39 | 354 | 51 | 676 |
| Vegetable Charcoal | 2603 | 5466 | 1995 | 4190 | 2784 | 5845 |
| Total | 36,975 | 76,434 | 32,349 | 85,347 | 34,778 | 89,599 |
| Building Materials. | | | | | | |
| Bamboos | 1188 | 3327 | 1310 | 3667 | 1114 | 3900 |
| Bricks and Tiles | 7812 | 3277 | 9185 | 3215 | 9977 | 4365 |
| Lime | 3111 | 3539 | 2842 | 2983 | 3229 | 3391 |
| Stone, Dressed | 2814 | 1724 | 3782 | 1986 | 3681 | 1932 |
| Timber | 4680 | 35,447 | 5252 | 40,100 | 7177 | 54,220 |
| Total | 19,605 | 47,314 | 22,371 | 51,951 | 25,178 | 67,808 |
| Drugs and Spices. Drugs | 91 | 1471 | 32 | 1192 | 113 | 2163 |
| Gums | 129 | 11,562 | 92 | 5560 | 167 | 13,500 |
| Mineral Salts | 168 | 3724 | 156 | 2416 | 169 | 4528 |
| Perfumes | 51 | 4143 | 60 | 7674 | 26 | 3782 |
| Spices | 2048 | 44,433 | 1875 | 55,347 | 1721 | 35,197 |
| Sulphuric Acid | 6 | 960 | 22 | 3786 | 13 | 2154 |
| Total | 2493 | 66,293 | 2237 | 75,975 | 2209 | 61,324 |
| Textile Fabria of Piece- goods. | | | | | | |
| Bags | 134 | 6290 | 258 | 11,983 | 264 | 11,366 |
| Blankets | 176 | 12,302 | 158 | 11,035 | 142 | 9985 |
| Carpets | 21 | 1873 | 27 | 1372 | 20 | 2192 |
| Cotton | 1290 | 223,179 | 1142 | 191,760 | 1324 | 227,488 |
| | | | | | | |

| Piecegoods | | | | | | |
|---------------------------|-------------|---------------|-------------|---------------|-------------|---------------|
| Silk Piecegoods. | 57 | 28,494 | 6 | 2970 | 7 | 4068 |
| Woollen Piecegoods | 12 | 4188 | 30 | 10,068 | 21 | 6888 |
| Total | 1690 | 276,326 | 1621 | 229,188 | 1778 | 261,987 |
| Metal Brass and Copper | 1457 | 120,362 | 2167 | 168,129 | 2209 | 165,332 |
| Iron | 1414 | 14,562 | 615 | 5691 | 2037 | 22,196 |
| Mercury | 1 | 270 | 4 | 909 | 6 | 1302 |
| Other Metals | 232 | 5274 | 129 | 4969 | 318 | 8195 |
| Tools and Cutlery. | 11 | 4115 | 12 | 1328 | 12 | 1296 |
| Total | 3115 | 144,583 | 2927 | 181,026 | 4582 | 198,321 |
| Grand Total | 170,77 6 | 1,176,88 1 | 174,22 0 | 1,296,29 0 | 178,49 0 | 1,306,17 3 |

Poona City Imports, 1881-1884—continued.

| ARTICLES. | ТО | TAL. | AVERAGE. | | |
|---------------------|---------|---------|----------|--------|--|
| Fuel. | Tons. | £ | Tons. | £ | |
| Candles | 84 | 7077 | 28 | 2359 | |
| Firewood | 88,797 | 103,586 | 29,599 | 34,529 | |
| Oil | 4089 | 107,065 | 1363 | 35,688 | |
| Oil Seeds | 2543 | 15,403 | 848 | 5134 | |
| Soap | 72 | 1210 | 24 | 403 | |
| Soapnuts | 135 | 1538 | 45 | 513 | |
| Vegetable Charcoal | 7382 | 15,501 | 2461 | 5167 | |
| Total | 103,102 | 251,380 | 34,368 | 83,793 | |
| Building Materials. | | | | | |
| Bamboos | 3612 | 10,894 | 1204 | 3631 | |
| Bricks and Tiles | 26,974 | 10,857 | 8991 | 3619 | |

| Lime | 9182 | 9913 | 3061 | 3304 |
|------------------------------------|--------|---------|--------|---------|
| Stone, Dressed | 10,277 | 5642 | 3426 | 1881 |
| Timber | 1709 | 129,767 | 5703 | 43,256 |
| Total | 67,154 | 167,073 | 22,385 | 55,691 |
| Drugs and Spices. Drugs | 236 | 4826 | 79 | 1611 |
| Gums | 388 | 30,622 | 129 | 10,208 |
| Mineral Salts | 493 | 10,668 | 164 | 3556 |
| Perfumes | 137 | 15,599 | 46 | 5200 |
| Spices | 5644 | 134,977 | 1881 | 44,992 |
| Sulphuric Acid | 41 | 6900 | 14 | 2300 |
| Total | 6939 | 203,592 | 2313 | 67,867 |
| Textile Fabria of Piece- goods. | | | | |
| Bags | 656 | 29,639 | 219 | 9880 |
| Blankets | 476 | 33,322 | 159 | 11,107 |
| Carpets | 68 | 5437 | 22 | 1812 |
| Cotton Piecegoods | 3756 | 642,427 | 1252 | 214,143 |
| Silk Piecegoods. | 70 | 35,532 | 24 | 11,844 |
| Woollen Piecegoods | 63 | 21,144 | 20 | 7048 |
| Total | 5089 | 767,501 | 1696 | 255,834 |
| Metal. Brass and Copper. | 5833 | 453,823 | 1944 | 151,274 |
| Iron | 4066 | 42,449 | 1355 | 14,150 |
| Mercury | 11 | 2481 | 4 | 827 |
| Other Metals | 679 | 18,438 | 226 | 6146 |
| Tools and Cutlery. | 35 | 6739 | 12 | 2246 |
| Total | 10,624 | 523,930 | 3541 | 174,643 |
| | | | | |

| ARTICLES. | 188 | 31-82. | 188 | 32-83. | 188 | 33-84. | TO | TAL. | AVE | RAGE. |
|--------------------------------|-------|--------|-------|--------|-------|--------|--------|---------|-------|--------|
| Grain. | Tons. | £ | Tons. | £ | Tons. | £ | Tons. | £ | Tons. | £ |
| Gram | 82 | 401 | 314 | 1756 | 295 | 1551 | 691 | 3708 | 230 | 1236 |
| Indian Millet | 207 | 869 | 1282 | 5382 | 369 | 1551 | 1858 | 7802 | 619 | 2601 |
| Spiked Millet | 1047 | 5133 | 769 | 4256 | 1307 | 6402 | 3113 | 15,790 | 1038 | 5263 |
| Rice | 419 | 2931 | 414 | 3478 | 240 | 2183 | 1073 | 8593 | 358 | 2864 |
| Wheat | 166 | 1164 | 947 | 7952 | 324 | 2265 | 1437 | 11,381 | 479 | 3794 |
| Other Grains | 33 | 194 | 425 | 1758 | 255 | 1339 | 713 | 3291 | 237 | 1097 |
| Total | 1954 | 10,692 | 4141 | 24,582 | 2790 | 15,291 | 8885 | 50,565 | 2962 | 16,855 |
| Groceries | | | | | | | | | | |
| Almonds | 1 | 24 | 353 | 9898 | 8 | 196 | 362 | 10,118 | 121 | 3373 |
| Arrowroot. | | | 25 | 552 | 9/2 8 | 7 | 25 | 559 | 8 | 186 |
| Betelnuts | 7 | 149 | 44 | 1345 | 78 | 2621 | 129 | 4115 | 43 | 1372 |
| Clarified Butter | 47 | 3345 | 107 | 8252 | 89 | 6247 | 243 | 17,844 | 81 | 5948 |
| Coffee | 5/28 | 9 | 14 | 2286 | 1 | 46 | 16 | 2341 | 5 | 780 |
| Cocoa- kernel | 118 | 2314 | 124 | 3456 | 98 | 1998 | 340 | 7768 | 113 | 2589 |
| cocoanuts | 12 | 101 | 38 | 321 | 14 | 117 | 64 | 539 | 21 | 180 |
| Groundnuts husked and unhusked | 6 | 36 | 183 | 1133 | 413 | 3671 | 602 | 4840 | 200 | 1613 |
| Raw Sugar | 1897 | 29,212 | 3592 | 53,502 | 3953 | 55,345 | 9443 | 138,059 | 3148 | 46,020 |
| Sugar | 201 | 6192 | 485 | 15,605 | 301 | 9259 | 987 | 31,056 | 329 | 10,352 |
| Tobacco | 65 | 1266 | 108 | 2122 | 188 | 3686 | 361 | 7074 | 121 | 2368 |
| Other Groceries | 18 | 285 | 30 | 280 | 23 | 538 | 71 | 1103 | 24 | 868 |
| Total | 2372 | 42,933 | 5104 | 98,752 | 5166 | 83,731 | 12,642 | 225,416 | 2414 | 75,139 |

| ARTICLES. | 1881-82. | | 1882-83. | | 1883-84. | |
|---|----------|--------|----------|--------|----------|--------|
| Miscellaneous. | Tons. | £ | Tons. | £ | Tons. | £ |
| Betel Leaves | 1200 | 16,804 | 1418 | 19,844 | 1406 | 23,621 |
| Dry Fish | 69 | 768 | 62 | 580 | 73 | 812 |
| Fruit | 350 | 980 | 177 | 496 | 686 | 1922 |
| Vegetables, Green. | 417 | 729 | 722 | 1264 | 714 | 1249 |
| Sundries | 155 | 279 | 28 | 39 | 45 | 127 |
| Total | 2191 | 19,560 | 2397 | 22,223 | 2924 | 27,731 |
| Food for Animals. Fodder | 3285 | 2299 | 3295 | 2306 | 5350 | 3745 |
| Grain Husk, Oilcake and Cotton-Seed | 89 | 285 | 103 | 348 | 72 | 163 |
| Total | 3374 | 2584 | 3398 | 2654 | 5422 | 3908 |
| Fuel. | | | | • | | |
| Candles | 3 | 264 | 71 | 5952 | 3 | 285 |
| Firewood | 722 | 758 | 494 | 519 | 1210 | 1694 |
| Oil | 484 | 12,207 | 573 | 16,054 | 511 | 12,853 |
| Oil Seeds. | 19 | 132 | 21 | 130 | 6 | 38 |
| Soap | 1 | 10 | 5 | 82 | 2 | 27 |
| Soapnuts | | | | | 4 | 59 |
| Vegetable Charcoal | 101 | 212 | 82 | 173 | 88 | 185 |
| Total | 1330 | 13,583 | 1246 | 22,910 | 1823 | 15,141 |
| Building Materiala | | | | | | |
| Bamboos | 4 | 10 | 5 | 14 | 11 | 42 |
| Bricks and Tiles | 498 | 242 | 196 | 69 | 523 | 229 |
| Lime | 2137 | 2430 | 1585 | 1664 | 2617 | 2748 |

| | | | | | | • |
|--|-------|-------------|------|--------|------|-------------|
| Stone, Dressed | 458 | 281 | 240 | 126 | 324 | 170 |
| Timber | 363 | 2883 | 185 | 1469 | 350 | 2875 |
| Total | 3460 | 5846 | 2211 | 3342 | 3825 | 6064 |
| Drugs and Spices. | | | | | | |
| Drugs | 15 | 179 | 10 | 417 | 9 | 339 |
| Gums | 41 | 4152 | 19 | 745 | 62 | 6182 |
| Mineral Salts | 39 | 660 | 3 | 41 | 19 | 278 |
| Perfumes | 2 | 116 | 15 | 966 | 7 | 1099 |
| Spices | 321 | 13,280 | 271 | 19,971 | 278 | 7241 |
| Sulphuric Acid | | | | | 1 | 198 |
| Total | 418 | 18,387 | 318 | 22,140 | 376 | 15,337 |
| Textile Fabrics and Piece- Goods. | | | | | | |
| Bags | | | 11 | 989 | 31 | 1510 |
| Blankets | 84 | 5868 | 65 | 4520 | 48 | 3375 |
| Carpets | 13/28 | 47 | | | | |
| Cotton Piece goods | 707 | 118,77 6 | 471 | 79,242 | 658 | 111,24 8 |
| Silk Piece goods | 22 | 10,710 | | | 5 | 2862 |
| Woollen Piece-goods | 3 | 1092 | 3/28 | 36 | 2 | 372 |
| Total | 816 | 136,49 3 | 547 | 84,787 | 744 | 119,36 7 |
| Metals. | | | | | | |
| Brass and Copper. | 124 | 10,372 | 159 | 12,446 | 2033 | 152.53 2 |
| Iron | 185 | 2049 | 116 | 1031 | 281 | 3341 |
| Mercury | | | | | 5/28 | 35 |

| Other Metals | 18 | 436 | 39 | 860 | 43 | 1700 |
|--------------------|------------|-------------|------------|-------------|------------|-------------|
| Tools and Cutlery. | 4 | 424 | 4 | 452 | 2 | 220 |
| Total | 331 | 13,281 | 318 | 14,789 | 2359 | 157,82 8 |
| Grand Total | 16,24 6 | 263,35 9 | 19,68 0 | 296,17 9 | 25,42 9 | 444,39 9 |

Poona City Exports, 1881 -1884—continued.

| ARTICLES. | TOTAL. | | AVERAGE. | |
|-------------------------------------|--------|--------|----------|--------|
| Miscellaneous. | Tons. | £ | Tons. | £ |
| Betel Leaves | 4024 | 60,269 | 1342 | 20,090 |
| Dry Fish | 194 | 2160 | 64 | 720 |
| Fruit | 1213 | 3398 | 404 | 1132 |
| Vegetables, Green. | 1853 | 3242 | 618 | 1081 |
| Sundries | 228 | 445 | 76 | 149 |
| Total | 7512 | 69,514 | 2504 | 23,172 |
| Food for Animals. Fodder | 11,930 | 8350 | 3977 | 2784 |
| Grain Husk, Oilcake and Cotton-Seed | 264 | 796 | 88 | 366 |
| Total | 12,194 | 9146 | 4065 | 3049 |
| Fuel. | | | | |
| Candles | 77 | 6501 | 26 | 2167 |
| Firewood | 2426 | 2971 | 809 | 990 |
| Oil | 1568 | 41,114 | 523 | 13,704 |
| Oil Seeds. | 45 | 300 | 15 | 100 |
| Soap | 8 | 119 | 2 | 40 |
| Soapnuts | 4 | 69 | 1 | 20 |
| Vegetable Charcoal | 271 | 570 | 90 | 190 |
| Total | 4399 | 51,634 | 1466 | 17,211 |
| Building Materials | | | | |

| Bamboos | 20 | 66 | 7 | 22 |
|--------------------------------------|--------|-----------|--------|---------|
| Bricks and Tiles | 1217 | 640 | 406 | 180 |
| Lime | 6339 | 6842 | 2112 | 2281 |
| Stone, Dressed | 1022 | 577 | 341 | 192 |
| Timber | 898 | 7227 | 299 | 2409 |
| Total | 9490 | 15,252 | 3165 | 5084 |
| Drugs and Spices. | | | I | |
| Drugs | 34 | 935 | 12 | 312 |
| Gums | 122 | 11,079 | 41 | 3693 |
| Mineral Salts | 61 | 979 | 20 | 326 |
| Perfumes | 24 | 2181 | 8 | 727 |
| Spices | 870 | 40,492 | 290 | 13,497 |
| Sulphuric Acid | 1 | 198 | | 66 |
| Total | 1112 | 55,865 | 371 | 18,621 |
| Textile Fabrics and Piece- Goods. | | | | |
| Bags | 42 | 2499 | 14 | 833 |
| Blankets | 197 | 13,763 | 66 | 4588 |
| Carpets | 13/28 | 47 | | 16 |
| Cotton Piece-goods | 1836 | 309,266 | 612 | 103,089 |
| Silk Piece-goods | 27 | 13,572 | 9 | 4524 |
| Woollen Piece-goods | 5 | 1500 | 2 | 500 |
| Total | 2107 | 340,647 | 703 | 113,550 |
| Metals. | | • | | |
| Brass and Copper. | 2315 | 175,350 | 772 | 58,450 |
| Iron | 582 | 6421 | 194 | 2140 |
| Mercury | 5/28 | 35 | | 12 |
| Other Metals | 100 | 2996 | 33 | 999 |
| Tools and Cutlery. | 10 | 1096 | 3 | 365 |
| Total | 3008 | 185,898 | 1002 | 61,966 |
| Grand Total | 61,355 | 1,003,937 | 20,452 | 334,645 |

Of grains the imports of rice average 9183 tons (257,134 mans) valued at £75,029 (Rs. 7,50,290) a year and the exports average 358 tons (10,013 mans) valued at £2864 (Rs. 28,640), leaving for Poona use 8825 tons (24,127 mans) valued at £72,165 (Rs. 7,21,650). Rice comes chiefly from Bhor and the Mavals or western hills of Poona. The rest comes from Kalyan and Panvel in Thana. From Bhor and West Poona rice is brought, chiefly by the growers on pack bullocks or in headloads; from Kalyan and Panvel it is brought by rail by local dealers. The chief rice markets are in the Narayan and Shukravar wards. To these markets rice is brought in large quantities especially on Monday and Thursday. Rice markets are held from the early morning till about ten. Rice is sold to Marwar and Maratha retail dealers, generally without the help of brokers. In selling them to the dealers, rice and other grains are always weighed by a third party called measurers or *mojnars* who are allowed a handful of rice for every 320 pounds (1 *palla* of 4 *mans*) weighed. Rice is the staple food of all classes, especially of Brahmans. In years of scarcity rice sometimes comes to Poona from Gujarat, Central India, and Bengal. From Poona rice is sent to Sholapur and Pandharpur, whose traders send agents to Poona to buy.

Bajri.

The imports of *bajri* average 15,059 tons (421,655 mans) valued at £77,449 (Rs. 7,74,490) a year and the exports 1038 tons (29,064 mans) valued at £5263 (Rs. 52,630), thus leaving for the city use 14,021 tons (392,591 mans) valued at £72,186 (Rs. 7,21,860). Besides locally from the eastern sub-divisions *bajri* comes from Vambhori in Ahmadnagar and from Phaltan in Satara. From Vambhori and Phaltan bajri is sent chiefly by the Marwar dealers of those towns. For bajri and other grains except rice the chief market is the broker's market in the Nana ward which is held from seven to ten in the morning. Bajri is sold through Marwari and Gujarat Vani and Maratha brokers who are paid 6d. (4 as.) for every 320 pounds (1 palla of 4 mows) of bajri sold; and the weigher as a rule is a Maratha, who is allowed a handful of *bajri* for measuring every 320 pounds. Most bajri dealers are Marathas and the rest Marwaris and Lingayats. Bajri is the staple food of all classes. It is ground into flour by women, kneaded with water into dough, and formed into thin circular cakes about twelve inches in diameter and one-eighth to onethird of an inch thick. These are first baked on iron pans, and, when dry, are thrust into red-hot cinders to complete the baking. The cakes are broken into pieces and either eaten in gruel or dry with onions or a relish of chillies, salt, and turmeric. From Poona bajri is exported by brokers. Since the opening of the Dhond-Manmad. Railway in 1878 bajri from Vambhori chiefly comes by rail and in small quantities by carts. In years of scarcity bajri also comes from Gujarat, Khandesh, and Jabalpur.

Indian Millet.

Indian millet or *jvari* imports average 3593 tons (100,613 *mans*) valued at £15,092 (Rs. 1,50,920) a year and exports average 619 tons (17,343 *mans*) valued at £2601' (Rs. 26,010) leaving for Poona use 2974 tons (83,270 *mans*) valued at £12,491 (Rs. 1,24,910).

The bulk of *the jvari* is grown locally, the rest conies from Sholapur and Satara. In the same way as *bajri*, *jrari* is sold in the broker's market. It is the staple food of the poor. It is ground into flour, kneaded, and baked into cakes like *bajri*.

Wheat.

Wheat imports average 8428 tons (235,952 mans) valued at £62,997 (Rs. 6,29,970) a year, and exports average 479 tons (13,408 mans) valued at £3794 (Its. 37,940), leaving for Poona use 7949 tons (222,544 mans) valued at £59,203 (Rs. 5,92,030). Wheat comes largely from the Baleghat in the Nizam's territory and in small quantities from the northern sub-divisions of Ahmadnagar. From the Baleghat wheat is brought in carts to Dhond by Kharda and Shrigonda in Ahmadnagar; from Dhond it is chiefly brought to Poona in carts and in small quantities by rail. To find work for themselves and their bullocks in the hot season husbandmen generally prefer to bring wheat to Poona in carts instead of sending it by rail from Dhond. From the north of Ahmadnagar the wheat trade centres at Vambhori whence it is sent by local Marwar dealers to Poona. Wheat is occasionally brought by rail from the Berars, Gujarat, Jabalpur, and sometimes from Agra and Benares. Wheat is used sometimes daily but chiefly on holidays by the upper and middle classes and on holidays and great occasions alone by the poor. In the same way as *bajri* and *jvari*, wheat is sold in the broker's market through brokers.

Gram.

Gram imports average 4669 tons (130,723 *mans*) valued at, £24,549 (Rs. 2,45,490) a year and exports average 230 tons (6448 *mans*) valued at £1236 (Rs. 12,360), leaving for local use 4439 tons (124,275 *mans*) valued at £23,313 (Rs. 2,33,130). Except that it is largely given to horses, the details given for wheat apply to gram.

Groundnuts.

Of Groceries the imports of groundnuts average 2092 tons (58,584 *mans*) valued at £13,967 (Rs. 1,39,670) a year and the exports average 200 tons (5605 *mans*) valued at £1613 (Rs. 16,130), leaving for the city use 1892 tons (52,979 *mans*) valued at £12,354 (Rs. 1,23,540). Groundnuts are grown locally and come from Satara. Much of the local produce, about half the imports, is brought in shells and used by Hindus mostly on fast days. The nuts are baked in their shell or fried and eaten. Sometimes they are pounded mixed with raw sugar, and made into balls for eating. From about two miles round the city groundnuts are brought fresh every day and sold to retail dealers by Kachis or Malis who buy the standing crops from the growers. From long distances groundnuts come unshelled and are sold to Telis or oilmen through brokers in the same way as grain.

Cocoa Kernel and Cocoanuts.

The imports of cocoa-kernel and cocoanuts average 902 tons (25,249 mans) valued at £13,271 (Rs. 1,32,710) a year and the exports average 134 tons (3773 mans) valued at £2769 (Rs. 27,690), leaving for Poona use 768 tons (21,476 mans) valued at £10,502 (Rs.

1,05,020). Large quantities of cocoa-kernel and cocoanuts come by rail from Bombay and small quantities in carts from Mahad in Kolaba. Cocoanuts are chiefly sold by Maratha Naralvalas that is cocoanut-sellers and cocoa kernels by Gujarat Vani grocers. The Naralvalas are poor and trade on borrowed capital. The Gujarat Vanis are well-to-do. Besides as a condiment large quantities of cocoannts are offered to the gods and distributed to friends and relations at marriage and other ceremonies. Since the opening of the railway in 1858 the imports of cocoanuts have considerably risen and the price fallen by about twenty-five per cent.

Betelnuts.'

The imports of betelnuts average 218 tons (6120 mans) valued at £6375 (Rs. 63,750) a year, and the exports average forty-three tons (1207 mans) valued at £1372 (Rs. 13,720), thus leaving for Poona use 175 tons (4913 mans) valued at £5003 (Rs. 50,030). Betelnuts are imported by Gujarat Vani grocers from Bombay, Belari, and Dharwar. Betelnuts are offered to the gods and to friends and relations on a visit they are served by way of courtesy. After a meal all Hindus generally chew betelnut either with betel-leaf or tobacco.

Raw Sugar.

Raw sugar or *gul* imports average 5271 tons (147,583 *mans*) valued at £78,024 (Rs. 7,80,240) a year, and exports average 3148 tons (88,139 *mans*) valued at £46,020 (Rs. 4,60,200), leaving for Poona use 2123 tons(59,444 *mans*) valued at£32,004(Rs. 3,20,040).[These returns must be increased by about ten per cent to represent the local produce which is not taxed,] Raw sugar comes in large quantities from the neighbourhood of Poona and from Satara, Poona, Kolhapur, and the Southern Maratha Country or the Bombay Karnatak. From Satara the growers themselves bring the raw sugar to Poona. From Kolhapur and the Bombay Karnatak the trade centres at Kolhapur whence the dealers send raw sugar to Lingayat brokers in Poona. In Poona the brokers either sell it to local Gujarat Vani dealers or consign it to Gujarat and up-country stations,to which the bulk of the exported sugar goes. At present (1884) all raw sugar comes in carts. After the opening of the West-Deccan or Poona-Londa railway, probably in 1889, this raw sugar, instead of going through Poona, will be sent direct to Gujarat and other places and Poona imports and exports will considerably fall.

Sugar.

Sugar imports average 1279 tons (35,814 *mans*) valued at £40,095 (Rs. 4,00,950) a year, and exports 329 tons (9205 *mans*) valued at £10,352 (Rs. 1,03,520), leaving for Poona use 950 tons (26,609 *mans*) valued at £29,743 (Rs. 2,97,430). Sugar is chiefly brought from Bombay by local Gujarat Vani dealers. Coarse sugar is also brought in small quantities from Kolhapur and the Bombay-Karnatak. The well-to-do and middle classes generally use sugar and the poor raw sugar.

Clarified Butter.

The imports of clarified butter average 798 tons (22,336 mans) valued at £59,276 (Rs. 5,92,760) a year, and the exports average 81 tons (2272 mans) valued at £5948 (Rs. 59,480), leaving for Poona use 717 tons (20,064 mans) valued at £53,328 (Rs. 5,32,380). Besides locally from the *Mavals* or western hills, clarified butter comes from Barsi in Sholapur, Athni in Belgaum, and the Sangli State. From the west the cattle owners themselves bring clarified butter to Poona, and from other parts it is chiefly imported by local Gujarat Vani dealers. The export is small.

Tobacco.

Tobacco imports average 848 tons (23,733 mans) valued at £16,606 (Rs. 1,66,060) a year, and exports average 121 tons (3378 mans) valued at£2358 (Rs. 23,580), leaving for Poona use 727 tons (20,355 mans) valued at £14,248 (Rs. 1,42,480). Tobacco comes in carts chiefly from Belgaum, Dharwar, Kolhapur, and Miraj. Poona has two or three Lingayat merchants who import large quantities of tobacco and sell it to retailers and makers of snuff. Tobacco is smoked made into snuff and chewed with betelnut and leaves. Before it is exported, tobacco is partly pounded into snuff by Brahman dealers and partly cut dressed and spiced for chewing by Brahman and Lingayat dealers. Poona snuff finds a market in Northern India, as far as Benares, and the dressed tobacco for chewing goes all over the Bombay Presidency. Of the total exports of 727 tons (20,355 mans) valued at £14,248 (Es. 1,42,480), about 121 tons (3393 mans) valued at £2341 (Es. 23,410) go as snuff and 606 tons (16,962 mans) valued at £11,907 (Es. 1,19,070) go as dressed tobacco for chewing. As the tobacco is either pounded into snuff or dressed for chewing before it is sent from Poona, it is probable that the trade will increase after the opening of the West Deccan Railway.

Vegetables.

According to the city octroi returns, for the three years ending 1883-84, the imports of green vegetables averaged 12,508 tons, (350,233 mans) valued at £21,890 (Es. 2,18,900), and the exports averaged 618 tons (17,295 mans) valued at £1081 (Rs. 10,810). To this must be added at least an equal amount of imports and exports of vegetables, which, being grown within municipal limits and carried in headloads, are free from the municipal tax. Green vegetables and fruits are grown in about 2000 acres of garden land within five miles of Poona. The growth of green vegetables and fruits has largely increased since the opening of Lake Fife and the Mutha Canal (1875-1879). The vegetable growers are Kachis and Malis who sell standing crops to wholesale dealers, chiefly Kachis, Marathas, Malis, and Bagvan Musalmans. To retail dealers vegetables are sold through Maratha and Mali brokers called dalals or dandivalas, who, besides a handful of vegetables, are paid 1½d.to 6d. (1-4 as.) on every sale of 320 pounds (1 palla of 4 mans) Vegetables are eaten daily by all classes. The exports, which date from the opening of the railway in 1858, are almost all to Bombay.

Betel Leaf.

Betel-leaf imports average 2160 tons (60,470 *mans*) valued at £32,321 (Es. 3,23,210), and exports average 1342 tons' (37,555 *mans*) valued at £20,090 (Es. 2,00,900), leaving for Poona use 818 tons (22,915 *mans*) valued at £12,231 (Es. 1,22,310). The growers of betel-leaves are mostly Tirgul Brahmans and a few Marathas, and the sellers, who are called Tambolis, are mostly Musalmans and few Marathas. A betel-leaf shopkeeper offers for sale betel-leaves betelnuts, slaked lime, catechu, and tobacco. Betel-leaf is eaten by all classes as a dessert after food. A couple of leaves with a little lime rubbed on with the finger to the back of each leaf, a quarter of a betelnut, and catechu are chewed together, and in addition to the some chew tobacco. The leaves are cured before being eaten Poona is known as having the best cured leaves in the Deccan.

Fresh leaves are harsh and bitter. To remove the harshness the leaves are kept closely packed till the sap dries when the leaf grows soft and gets a shining yellow. Betel-leaf is largely sent to Bombay

Fish.

Imports of dry and salted fish average 620 tons (17,373 mans) valued at £6949 (Rs. 69,490). Of this, as an article of trade only sixty-four tons (1900 mans) valued at £720 (Rs. 7200) are sent to Bhor. Of the rest about 556 tons (55,737 mans) valued at £6229 (Rs. 62,290) are locally sold in small quantities to the people of the *Mavals* or western hills, and as much is used by the city people. Fish is imported from Bombay and the Konkan, mostly by two large traders, and in small quantities by a few local Bhois. The retail sellers are Bhoi and Musalman women. Fish is eaten by Musalmans and by all flesh-eating Hindus.

Fooder.

Of food for animals, fodder imports average 30,726 tons (860,334 mans) valued at £21,508 (Rs. 2,15,080) a year, all of which is used in Poona. 3977 tons (111,344 mans) valued at £2784 (Rs. 27,840), shown under exports in the above statement, are fodder passed free of duty from Government grass-lands or *kurans* for Government cattle and horses. Of fodder grass comes from Government forest and pasture reserves and neighbouring villages, and millet and other straw from a distance of twenty-four miles round Poona. The chief fodder markets are held in the north and west of the city where the growers sell fodder through Maratha brokers who are paid 6d. (4 as.) for every cartload.

Chaff.

Imports of chaff oil-cake and cotton seed average 1169 tons (32,737 mans) valued at £3040 (Rs. 30,400) a year, and exports average eighty-eight tons (2468 mans) valued, at £265 (Rs. 2650), leaving for Poona use 1081 tons (30,269 mans) valued at £2775 (Rs. 27,750). Of these chaff and husks come from West Poona or the Mavals where rice is largely grown; oil-cake comes from the east from Sirur and latterly from Gujarat; and cotton seed comes from the south and east. Generally the growers bring these articles to

Poona where they are bought by milkmen and other consumers. The exports are chiefly to neighbouring villages by well-to-do people who keep milch cows and buffaloes.

Firewood.

Of fuel and lighting materials firewood imports average 29,599 tons (828,771 mans) valued at £34,529 (Rs. 3,45,290) a year; this import is all used in Poona. About 809 tons (22,646 mans) valued at £990 (Rs. 9900), shown under exports in the statement, are the firewood used in the cantonment which lies outside of municipal limits. The main imports of firewood are *babhul* wood from the east and the poorer classes of trees chiefly from Government forests in the west of the district and from the Bhor state. The firewood of the Government and Bhor state forests is yearly leased by wholesale Maratha timber dealers of Poona who sell it to Maratha petty dealers in the city. From other parts standing trees are bought by Maratha petty dealers and sometimes by Mhars who fell and bring the wood to the city. During the last twenty years, as the supply is short of the demand, the price of firewood has steadily risen.

Charcoal.

Charcoal imports average 2461 tons (68,899 *mans*) valued at £5167 (Rs. 51,670, a year. The exports are small. The charcoal dealers are Lonaris who buy wood in the forest, make it into charcoal, and import the charcoal into the city on hired pack bullocks, mules and ponies. Charcoal is largely used by blacksmiths coppersmiths and other metalworkers. During the last twenty-five years, as the district is bare of forests, the price of local charcoal has so greatly risen, that the large metal factories have to use coal and coke.

Trade

Imports of oilseeds average 848 tons (23,737 mans) valued at £5134 (Rs. 51,340) a year. Oilseeds come chiefly from the Poona district and are sold in the same way as *bajri* and other grains. The exports are small.

Oil.

Imports of oil other than kerosine average 1363 tons (38,164 *mans*) valued at £35,688 (Rs. 3,56,880) a year, and exports average 523 tons (14,632 *mans*) valued at £13,704 (Rs. 1,37,040), thus leaving for the city use 840 tons (23,532 *mans*) valued at £21,984 (Rs. 2,19,840). Imports of kerosine oil roughly average 810 tons (22,650 *mans*) valued at £7930 (Rs. 79,300) a year. Groundnut safflower and sesame oil is brought from Indapur and Sasvad in Poona, from Barsi in Sholapur, and from Satara; and cocoanut oil and kerosine from Bombay. Large quantities of oil are pressed in Poona by Hindus of the Teli caste.

Bricks.

Of building materials imports of bricks and tiles average 8991tons (251,758 *mans*) valued at £3619 (Rs. 36,190) a year. Bricks and tiles are made by local potters in the outskirts of the city.

Stone.

Imports of cut-stone, chiefly quarried in the neighbouring hills, average 3426 tons (95,922 *mans*) valued at £1881 (Rs. 18,810) a year.

Lime.

Imports of lime, which is baked in the outskirts of the city, average 3061 tons (85,696 *mans*) valued at £3304 (Rs. 33,040), and; exports, which are chiefly to Kirkee, average 2112 tons (59,162 *mans*) valued at £2281 (Rs. 22,810).

Timber.

Timber imports average 5703 tons (159,673 mans) valued at £43,256 (Rs. 4,32,560), and exports which are chiefly to neighbouring villages and Kirkee average 299 tons (8378 mans) valued at £2410 (Rs. 24,100). Of timber Maulmain teak comes from Bombay. Of local teak the large logs come from Nasik and the rafters from Thana; junglewood comes from the *Mavals* or West; Poona hills and Bhor, and *babhul* wood from twenty-four miles, round Poona. The large trade with Bombay and Thana is in the hands of Konkan and Cutch Musalmans who trade on their own capital Other petty timber dealers are Marathis who trade on capital borrowed at high interest.

Bamboos.

Bamboo imports average 1204 tons (33,716 *mans*) valued at £3631 (Rs. 36,310) a year. Split bamboos fit for roofs an brought from Bombay by large Musalman timber dealers; and green bamboos fit to make baskets and matting are brought from the *Mavals* or western sub-divisions by villagers and sold either the Maratha timber dealers or to Buruds or basket-makers.

Drugs and Spices.

Imports of drugs and spices average 2313 tons (64,762 mam valued at £67,867 (Rs. 6,78,670) a year. Drugs and spices are chief brought by Gujarat Vani grocers from Bombay.

Piece Goods.

Piece-goods imports average 1696 tons (41,497 *mans*) valued at £255,834 (Rs. 25,58,340) a year, and exports average 702 tons (19,667 *mans*) valued at £113,550 (Rs. 11,35,500). Of handmade cotton cloth coarse waistcloths or *dhotars* and robes or *sadis* are brought from Sholapur by Shimpis, and fine waistcloths and robes are brought by

Marwar Vanis from Nagpur and Dharwar or Narayan Peth in the Nizam's territories and sometimes from Benares in North India, and Salem and other parts of Madras. Steammade cotton piece-goods, both of English and of Bombay make, were formerly brought by Bohoras and are now also brought by Brah-mans and Marathas. Of late the use of Bombay-made cloth has greatly increased. Foreign silks, brocades, and woollen cloth are brought by Bohoras from Bombay, and country blankets are brought by Sangars from Sholapur. Besides these imports a large quantity of coarse cotton robes and waistcloths and richly embroidered silk cloths are locally woven. The exports are consigned direct, chiefly to Satara and other southern districts. After the opening of the Poona-Londa Railway this export trade, instead of probably passing through Poona, will go direct and the Poona trade will fall considerably.

Metal

Metal imports average 3541 tons (99,157 mans) valued at £174,643 (Rs. 17,46,430) and exports average 1002 tons (28.067 *mans*) valued at £61,966 (Rs. 6,19,660). The exports include only metal sheets and do not include the brass and copper vessels which, average about eighty per cent of the metal sheets imported. The imports have been steadily increasing. In 1882-83 they were about twenty per cent above the average or worth £250,000 (Rs. 25 lakhs). The working into vessels adds about twenty-five per cent to the value of the metal. So that the value of the exported ware may be roughly estimated at £240,000 (Rs. 24 *lakhs*). During the last twenty-five years the metal trade of Poona has steadily grown. Poona has displaced Ahmadnagar which used to be the chief metal mart in the Deccan, and supplies are now sent not only over the whole Deccan, but also to the Berars, Khandesh, and the Nizam's territory. The finer vessels of Nasik and Sangli are rivalled by the Poona wares. Even in the finer articles, in a few years Poona will probably displace Nasik and Sangli. Of metals Europe-made copper, brass, and iron are largely brought from Bombay by Gujarat Vanis. To make vessels Gujarat Vanis employ local Kasar Tambat and other craftsmen. The making of brass and copper vessels gives work to about 3000 men who are paid either monthly or by the piece. The original workers came from Ahmadnagar. Lately, owing to the thriving trade, many Marathas and others have taken to this craft and several Gujarat Vanis have grown rich.

Cotton.

Of articles freed from municipal taxes, cotton imports for 1882-83 were 124 tons (680 *mans*) valued at £884 (Rs. 8840) and exports were 213 tons (5974 maws) valued at £7766 (Rs. 77,660). The imports are chiefly from the south-east of the district where cotton is grown. Most of the cotton dealers are Gujarat Vanis.

Dye Roots.

Imports of dye roots, barks, and other colouring materials for 1882.-83 were 131 tons (3670 *mans*) valued at £367 (Rs. 36,700) and exports were 315 tons (8818 wans) valued at £882 (Rs. 8820). These articles are gathered in the forests and brought to the market by

the hill people of West Poona and sold to Gujarat Vani grocers. In this trade the grocers make a cent per cent profit.

Dried Fruit

Imports of dried fruit for 1882-83 were 680 tons (19,028 mans) valued at £15,222 (Rs. 1,52,220) and exports 461 tons (12,900 mans) valued at £10,318 (Rs. 1,03,180). Of dried fruit, dried plantains are brought from Bassein in Thana by Gujarat Vanis and dried figs, pomegranates, grapes, and other fruits are brought from Arabia, Persia, and Kabul by Baluchis and Kabulis. The exports are chiefly to Ahmadnagar, Sholapur, Satara, and the Bombay Karnatak.

Glass.

Imports of glassware and glass bangles for 1882-83 were 272 tons (7604 *mans*) valued at £3820 (Rs. 38,200), and exports were thirty-one tons (854 *mans*) valued at £427 (Rs. 4270). European glass-ware is brought from Bombay by Bohoras. Of bangles Chinamade cut bangles come from Bombay, and country bangles from the village of Velu on the Poona-Belgaum mail road about twelve miles south of Poona. The bangle-sellers are Kasars. The exports are chiefly to neighbouring villages.

Hides and Horns.

Imports of hides and horns for 1882-83 were 134 tons (3574, *mans*) valued at £4485 (Rs. 44,850), and exports were 622 tons (17,427 mans) valued at £20,909 (Rs. 2,09,090). Hides and horns are brought by village Mhars from neighbouring villages and sold to Saltankars and Dhors. From Poona Saltankars and Dhors export; hides and horns to Bombay. Three or four unsuccessful attempts have been made by Bombay merchants to start tanneries at Poona, and the tanneries which were built are now in ruins.

Salt,

Salt imports for 1882-83 were 429 tons (12,010 mans) valued at, £3002 (Rs. 30,020) a year. Little is exported. Salt is brought by Gujarat Vani grocers from Bombay.

Stationery.

Imports of stationery for 1882-83 were 189 tons (5286 mans) valued at £52,860 (Rs. 5,28,600) and exports were 85 tons (23911 mans) valued at £23,900 (Rs. 2,39,000). Stationery is brought from Bombay by Bohoras, Marathas, and lately by Brahmans. The exports do not change hands in the city, but pass through Poona on the way to Satara and other southern districts.

Twist.

Imports of machine-made twist for 1882-83 were 472 tons (13,210 *mans*) valued at £2642 (Rs. 26,420). Twist is brought from Bombay by Marwar Vanis and is generally sold to local weaves Large quantities are used in thread-making factories lately started by Brahman capitalists and worked by Maratha boys.

Smoking Hemp.

Of intoxicating articles imports of smoking hemp or *ganja* for 1882-83 were twenty tons (560 mans) valued at £406 (Rs. 4060) and exports were six tons (170 mans) valued at £120 (Rs. 1200) Smoking hemp comes from Ahmadnagar and Sholapur. The right to sell it is yearly farmed to one dealer. *Ganja* is smoked chiefly by Gosavis and ascetics. The exports are chiefly to neighbouring villages.

Opium.

Opium imports for 1882-83 were two tons (seventy *mans*) valued £5530 (Rs. 55,300). Opium is supplied by Government to the farmer to whom the right of selling opium is yearly sold. Opium is smoked and eaten chiefly by Musalman Fakirs or ascetics.

Country Liquor.

Imports of country liquor for 1882-83 were 495 tons (13,870 mans) valued at £55,480 (Rs. 5,54,800), and exports were 127 tons (3570 mans) valued at £14,280 (Rs. 1,42,800). This liquor is supplied by the central distillery established at Mundhave about eight miles east of Poona. The right of selling country liquor is yearly sold to the highest bidder. The exports are chiefly to neighbouring villages.

European Liquor.

Imports of European liquor for 1882-83 were 610 tons (17,090 *mans*) valued at £102,540 (Rs. 10,25,400), and exports were fifty-one tons (1432 *mans*) valued at £8592 (Rs. 85,920). European liquor is brought from Bombay by Parsis and Europe shopkeepers. It is chiefly used by Hindus in the city and by Christians and Parsis in the cantonment. The exports go chiefly to Satara and the Bombay Karnatak.

Crafts.

Of about 25,000 craftsmen about half the number are capitalists and the rest work as labourers. The chief Poona city crafts are the making of copper and brass vessels, the weaving of silk and cotton cloth, the making of gold and silver threads, glass bangles, ivory combs, clay figures, iron pots, felt and paper, tape-weaving, and wood-turning. As Poona city is the great centre, almost the only seat of these crafts and industries, the details have been given in the chapter on trade and crafts. [See Part II. pp. 173-210.]

Markets,

Poona City has twenty-six markets. Of these five are vegetable markets, six are mutton markets, three are fish markets, one is a fuel market, two are fodder markets, and nine are grain markets. The five vegetable and fruit markets are, the Mandai or market to the north of the Shanvar Palace, the Kotval Chavdi or police office in Budhvar ward, and three Bhajialis or vegetable rows one in Vetal ward and two in A'ditvar ward, a larger near Durjansing's Paga, and a smaller to the east of Moti Chauk or Pearl Square. In addition to these, on a suitable site in the Shukravar ward, a large central market is (1884) being built.

Mandai.

The largest and most popular market in Poona is the Mandai, the fruit and vegetable market to the north of the Shanvar Palace. It is held in an open space 166 yards by 45 which was originally set apart for the retinues of the Peshwas and their nobles in state or festive gatherings. This space and the narrow belt all round the palace wall between its bastions have been levelled and sanded and laid out in paths and rows of stalls. The stalls are four to six feet square and the paths six to ten feet wide. A road running north and south divides the Mandai proper, that is the large space to the north of the palace into an eastern and a western half. The eastern half has been set apart for fruits and green vegetables, and the western half for fruits, vegetables, root vegetables, and miscellaneous articles. The northern third of each half is set apart for brokers and wholesale dealers, and the two southern thirds are allotted to petty stall keepers. From four to seven in the morning Kunbi and Mali carts laden with vegetables, lemons, figs, oranges, groundnuts, potatoes, and other field and garden produce come from the villages and gardens round Poona to market and are ranged in rows on the ground set apart for wholesale dealers.

The wholesale dealers, who are Kachis or market-gardeners of Upper Indian origin and Marathas, buy the daily arrivals soon after they come to market and dispose of them in small lots to retailers who carry them to their stalls and sell them to users. The market hours are six to eleven in the morning. Among the middle classes home supplies are bought by the male heads of families. Among the lower classes the women generally come and the higher classes send their servants to buy supplies. As soon as their morning wholesale purchases are over, the wholesale dealers daily send in wicker baskets large quantities of potatoes, onions, chillies, and leaf vegetables, the produce of gardens within twenty miles of Poona, to Bombay, Sholapur, and the Nizam's country. These dealers have agents in Bombay, or are themselves agents to Bombay dealers, to whom they consign the produce. Besides the wholesale dealers another class of middlemen, the brokers or dalals, bargain for buyers and sellers and weigh the articles for a fee. The scale on which the wholesale traders deal varies greatly, some of them being large traders and men of capital. The brokers make 2s. to 4s. (Rs. 1-2) a day and spend all their earnings. The retail sellers, who seldom have capital, borrow 4s. to 10s. (Rs. 2-5) from moneychangers for the day at an interest of ½ anna the rupee, make their purchases, and, after selling them retail, return the lender his money with interest. Their daily profits vary from 6d. to Is. (4 - 8 as.). When the retail stallholder has bought his day's supplies, he or she, for as many women as men sell, spreads on the ground a mat or a piece of sacking, and, on the sacking, lays the articles either in baskets or in heaps and sits among the

baskets with a pair of scales close at hand. These retail dealers are chiefly Kachis and Malis who are Hindus, and Tambolis who are both Hindus and Musalmans. The Kachis chiefly sell fruit, the Malis both fruit and vegetables, and the Tambolis seldom anything but betel-leaves and tobacco. On the east side of the Palace gateway, between the bastions, in a row next the road, Musalman Atars deal in the coloured powders which are used in making brow-marks, and in incense and perfumery. They arrange their wares in small heaps on metal plates laid on wooden stools. Over their wares, as a sunshade, they open a large umbrella or stretch a cloth on poles. They bring their stores daily to market on their heads and carry back what remains unsold. They make their goods at home from raw materials which they buy from grocers. Behind the Atars two rows of Maratha Vani women sell three varieties of grass-seeds, devbhat rajgira and vari, groundnuts raw sugar, salt, and articles eaten on fast days. [The botanical names of two of the three grass seeds or early that is primeval grains are rajgira Amaranthus polygamus, and vari Coix barbata.] Behind these stalls, in a row against the Palace wall, sit a few grocers or Nestis whose chief wares are assafaetida, cinnamon, cloves, cocoanuts, coriander, cumin-seed, pepper, sesame, spices, and turmeric. To the east of the perfumers and grass-seed sellers sit a few Malis and Brahmans who sell plantain-leaf dining plates; further east a few Gurav or priestly Maratha women sell *patravals* or dry leaf platters, of six or ten leaves of the palas, banian, and other large-leafed trees stitched together round a centre leaf. Behind the Gurav platter-sellers are cocoanut-sellers or Naralvals. The shroffs or moneylenders and changers, all Deshasth Brahmans, sit with a heap of copper coins and cowrie-shells piled on a small cloth stretched before them. They squat in threes and fours as near the retail sellers as possible. Besides the interest on daily cash advances to petty dealers they earn 6d. to 9d. (4-6 as.) a day from changing copper for silver and shells. In all transactions under $\frac{3}{8}d$. ($\frac{1}{4}a$.) cowrie or kavdi shells are used, eighty to ninety-six shells going to the quarter anna. The shells are counted with notable speed in sets of four. The ground between the bastions to the west of the eastern gate is held by a row of vegetable dealers fronting the road, chiefly Malis who sell their garden produce retail instead of parting with it wholesale in the morning. Behind the Malis are two rows of garlic tamarind onion and other relish sellers; and behind these again, touching the wall, sit dealers in chillies who are specially kept to this out-of-the-way place to avoid the nuisance which chillies cause when exposed to the sun and wind. The wholesale dealers carry on their business in the open air and generally finish their work before the sun gets strong. The retail dealers either open a large umbrella or stretch a cloth over their stalls to shelter themselves and their wares from the sun and rain. The dealings in green vegetables are carried on under the shade of one or two large banian trees in the northwest of the open space. The narrow strip of ground along the east of the palace wall, between the first two bastions from the north-east corner, is occupied by a front row of dealers in haberdashery; by a middle row of dealers in tobacco and spices; and in the space close under the wall by rope-selling Mangs. The space between the bastions further south is allotted to basket-makers, potters, dealers in old iron, old brass and copper vessels, and old furniture. The basket-makers or Buruds live in the houses across the road from their stalls. The potters store their wares in rented houses. Most of the dealers in ironware are Bohoras. On the south side of the palace, on the strip of ground to the east of the centre bastion, shoemakers and fisherwomen of the Bhoi caste sit in two lines facing each other. Only dry fish brought from the Konkan are sold here; fresh river fish are sold

from door to door. The space to the west of the centre bastion is empty and is set apart as a carriage stand. On the west side of the palace, the strip of land to the south of the centre bastion is the grass market where bundles of green and dry grass and stalk fodder are stored. The trade in stalk fodder and, dry grass is brisk, the dealers making 1. to 2s. (Re. ½ -1) a day. Green grass is brought by villagers-from twelve miles round in head-loads and is offered for sale at 2½d. to 4½d. (1½ - 3 as.) a load. The strip of land to the north of the centre bastion is held by dealers in firewood and cowdung-cakes about ten inches across and one inch thick. The firewood is cut in thirty pound (¾ man) faggots worth 6d. to 1s. (4 -8 as.). The cowdung-cakes are piled in small heaps and sold at $\frac{1}{8}d$. to $\frac{1}{16}d$. each (3-6 for 1/4 a.). A few timber-dealers buy trees in the villages round Poona, cut them, and dispose of the fuel in the city at a large profit. On an average fairweather day in 1882, of all kinds of produce 185 cart-loads weighing about seventy-nine tons (2220 mans) and worth about £210 (Rs. 2100) were brought to the Mandai. Of the whole amount sixty cart-loads weighing about twenty-six tons (720 mans) and worth £90 (Rs. 900) were vegetables; twenty cart-loads weighing about nine tons (240 mans) and worth £60 (Rs. 600) were fruit; ten cart-loads weighing about four tons (120 mans) and worth £5 (Rs. 50) were firewood; eighty cart-loads weighing about thirty-four tons (960 mans) and worth £40 (Rs. 400) were fodder; and fifteen cart-loads weighing about six tons (180 mans) and worth £15 (Rs. 150) were miscellaneous. On holidays and fast days specially large quantities of sweet potatoes or ratalas and earthnuts or bhuimugs are generally sold. Oil Sundays and Wednesdays a market is held in the afternoon to the south and east of the Shanvar palace at which old furniture, books, pictures, clothes, lamps, glassware, and lumber are sold by dealers from the cantonment bazar. On these days also villagers from the country round bring poultry and eggs, and carpenters bring stools, churns or ravis, pestles or musals, and two varieties of dishes called kathvats and padgas. Upto 1862 the space to the north of the palace was used for the half-weekly' cattle-market which is now held in the village of Bhamburda across the Mutha to the west of the city. The Mandai market is open every day in the year. Holidays are busier rather than slacker than other days. The market is over by noon when the municipal sweepers and water-carts come and sweep and water the ground for next morning. Of the four smaller vegetable and fruit markets, that held in the Kotval Chavdi or police office in Budhvar ward is in a large building once the property of Government which in 1845 was sold to a private person. The three Bhajialis or vegetable rows, one in Vetal ward and two in Aditvar ward, are open markets where the dealers squat at the side of the street or in house verandas. All these four smaller markets are open throughout the day. The dealers, who are Kachis and Malis, buy their stocks at the Mandai market in the early morning and sell at their stalls to consumers.

Mutton.

Of the six mutton markets, one in Kasba ward has twelve stalls, one in Khatikali or Butchers' row near Subhansha in Ravivar ward has fourteen stalls, one in Durjansing's Paga in Ravivar ward has forty-eight stalls, one in Yetal ward has sixteen stalls, one in Bhavani ward has six stalls, and one in Nana ward has sixteen stalls. The mutton markets in Kasba, Yetal, Nana, and Bhavani wards have been built by the Municipality since 1877. The market in Durjan-sing's Paga is a large quadrangular private building hired by

the Municipality and let to butchers. Butchers' row near Subhansha is the oldest mutton market in the city. Here the butchers have their private stalls or sell in the front rooms of their dwellings. They have a common slaughter-house. The Bhavani ward mutton market, is a private building fronting the main road leading to the cantonment bazar which is temporarily licensed by the Municipality for the sale of meat The municipal mutton marketsare built on a standard plan with detached slaughter-houses. The stalls are arranged facing each other in a covered building on two feet high plinths with a central passage under the ridge. The side walls, which form the backs of the stalls, are carried to within two feet of the post plate and eaves of the roof. Each stall is six feet wide and seven feet long. It opens on the central passage and is separated from the next stalls by the posts which bear the roof. The whole of the inside stalls, as well as the passage, are paved and are washed daily. The slaughter-houses are paved and walled enclosures with an open entrance in one corner covered by a screen wall. Inside the pavement slopes to a gutter which drains into a cesspool dutside, the contents of which are removed daily. The private markets are ordinary sheds or chals with earthen floors and detached slaughteryards. The number of animals daily slaughtered varies from sixty to 180 and averages 120, three-fourths of them sheep and one-fourth goats. The slaughtered animals are hung up to poles in the slaughter-houses, skinned, and dressed, and the mutton is carried to the market and hung by ropes from hooks in front of the stalls. The butcher sits on a piece of sacking or mat on the floor of the stall with the meat hanging in front of him and a block of wood resting against his legs. The customers stand outside or below the stall where they are served. Mutton sells at $2\frac{1}{4}d$. to 3d. ($1\frac{1}{2}$ - 2as.) a pound. A butcher kills daily one to three sheep or goats according to demand. Buyers generally keep to one butcher and those that use meat daily settle accounts once a month. The butchers are Marathas and Muhammadans. Most animals are slaughtered by Musalman priests or *mullas* who are paid $\frac{3}{4}$ d. to $\frac{3}{4}$ d. ($\frac{1}{4}$ - $\frac{1}{2}$ a.) an animal. Musalmans kill animals the killer facing west with the animal's head to the south and the legs to the north. Jews, Bohoras, and some Marathas have peculiarities in the way of slaughtering animals and have compartments allotted to them at the slaughter-houses. The Bohoras do not kill the animals on the stone pavement but on wooden platforms. Some Marathas first offer the animal to the goddess Bohai and after killing it offer its head to the goddess. Jews have a special butcher and have compartments allotted to them at the different slaughter-houses.

Fish.

The three fish markets are to the south of the Shanvar palace and in Aditvar and Vetal wards. In open ground to the south of the Shanvar palace forty or fifty stalls are kept daily by Bhoi women for the sale of dry Konkan fish. A well-built private fish market with twenty-four stalls arranged in rows in Aditvar ward back street is used chiefly for the sale of salt fish, with a few fresh fish in the evening. A third fish market is held in Vetal ward where fresh fish and a little dry fish are offered in an open plot. Women of the Bhoi caste are the chief fish-sellers and Kunbis from the neighbouring villages are the chief consumers.

Fuel.

The chief fuel of the upper and middle classes is firewood which is brought in carts and sold at 8s. to 10s. (Rs.4-5) the cart-load. Cowdung-cakes are the main fuel of the bulk of the townspeople. A cart-load of about 500 cakes costs 4s. to 6s. (Rs. 2 - 3). Retail sales of firewood and cowdung-cakes are made at the Mandai under the west wall of Shanvar palace and in many private enclosures. The only market where a month's supply or other large quantity can be bought is the Gadetal or Cart Stand in the north-east of Mangalvar ward. This tal or stand is an open field, let only during the fair season, where about 175 cart-loads of cowdung-fuel and 250 cart-loads of firewood are daily brought and sold. Two large fodder markets are open only during the fair season, the Cart Stand or Gadetal which is also used as a fuel market and the sandy bed of the Mutha under the Lakdi bridge to the north-west of the city. Kadba, that is Indian millet or jvari stalks, is the chief fodder used in the city. About 200 cart-loads, containing 100 to 200 bundles and selling at 8s. to 12s. (Rs. 4 - 6), are brought daily to the Gadetal and sixty cart-loads to the Lakdi bridge market. Besides in these two chief markets millet stalk and fodder can be bought retail in the Mandai and in several other places in different parts of the city. Hay or grass is stacked in large quantities beyond the Lakdi bridge and in the out lying yards on the west of the Sadashiv ward. Hay is rarely used in the city. Most of the dry grass goes to the military cantonment where large quantities are used as horse-fodder. Fuel and fodder are brought to the city markets by villagers in their own carts and sold either to wholesale dealers or to consumers.

Grain.

The city has nine grain markets: Adte or Commission Agents' row in Nana ward, Dane or Grain row in Narayan ward, Dane row in Shukravar ward, Dane row in Budhvar ward, Dane row in Vetal ward, a rice market in Shukravar ward, pulse rows or Dalalis in Mangalvar Bhavani and Ganj wards, and a Maide or flour row in Aditvar ward. The chief food grains used in Poona are bajri, jvari, rice, and wheat, and of pulse tur and gram. Besides supplies from the villages round, bajri is brought from Vambhori a market town in Ahmadnagar, jvari from Sholapur, rice from West Poona and Thana and wheat and gram from the Upper Hills or Baleghat to the north-east of Sholapur. In special seasons grain comes from much greater distances. During the 1876-77 famine quantities of grain poured in from Central and Northern India and from Gujarat In ordinary years the grain merchants of Poona import only for local use; during the 1876-77 famine Poona became the chief grain centre for the Bombay Deccan. The chief market for wholesale grain dealings is the Adte Ali or Agents' row in Nana ward. About forty of these dealers, chiefly Marwar and Gujarat Vanis, have large houses with front and rear enclosures and grain stores in neighbouring streets. Imports by country carts are brought to market in the morning and sales are negotiated at once. Imports by rail are brought at noon and in the afternoon and are sold off next morning. Grain is generally bought and kept in stock in 200 pound (2½ mans) bags which are opened only when the grain has to be measured out. During the fair season large heaps of grain-bags lie in front of the shops or in the open enclosures. The grain-dealers either buy on their own account or act as agents for the purchase or sale of supplies for others in distant districts charging a three to five per cent commission. Residents in Poona who can afford it, buy their year's supply of grain at once. Bajri and jvari are bought in January and February, rice in November and

December, and wheat and pulse in March and April. Except some retail grain-dealers of Narayan ward all retailers in the city buy in the wholesale market of the Nana ward. They either buy a year's stock at the proper season or. as they sell off their stock according to the means at their command. The wholesale dealers are men of capital, the retail dealers borrow money and trade on the security of their stocks. The Narayan ward dealers are Marwar Vanis of small capital, and as many of them have money dealings with the landholders of West Poona, they buy direct from the villagers. Narayan ward has about thirty retail grain shops, and in the grain row in Shukravar ward, which is the leading retail grain market in the city, are about 105 grain shops. Vetal ward has fifteen shops and Apa Balvant street in Budhvar ward has forty. In the wholesale markets grain is measured and sold as it comes. In the retail markets it is dried in the sun, winnowed in the breeze, cleaned, and laid out, if the quantities be large in bags, and if small in baskets, in the shops, at the street sides, or on the shop boards. All retail grain-dealers are Marathas. They keep their shops open all day, but most business is done in the evening. They earn 2S. to 6s. (Rs. 1-3) a day. The Mavlis or West Poona landholders bring their rice to market in head-loads or on ponies generally in November and December and only on Mondays or Thursdays. They go to the grain row in Shukravar ward, where each retailgrain dealer has his own west highland villagers who go only to his shop. The dealers either sell on commission on account of the growers who bring their produce to market, or they buy wholesale from the growers on their own account and sell afterwards.

Pulse Splitting.

In Poona the making of gram, *tur*, and other pod-seeds into pulse is a distinct calling carried on by Pardeshi or North Indian and Maratha *dalvalas* or pulse-splitters. The beans are soaked in water in large earthen pots for an hour or two, and laid in the sun to dry, which helps to separate the husk from the seed. When the beans are dry they are lightly ground in large stone handmills, the upper piece of which is balanced on a pivot and lowered or raised at will so as to keep the two pieces far enough apart to split without crushing the beans. After being split the beans are winnowed and sifted and the split pulse is ready for sale. The husk or *phol* and the refuse or *chun* are sold as food for milchcattle. Pulse-makers work and sell in three parts of the city: in thirteen shops in pulse row or Dal Ali in Mangalvar ward, in forty-five shops in Dal Ali in Bhavani ward, and in sixty shops in Dal Ali in Ganj ward. During the hot season, when only they work, the pulse-dealers make 2s. to 4,s. (Rs. 1 - 2) a day. All are well-to-do.

Flour Grinding,

A part of east Aditvar street is held by Maratha flour-grinders or *maidevalas*. In making flour, as in splitting pulse, the grain is soaked in water and dried in the sun, and is then ground as fine as possible. The flour is afterwards sifted through a sieve, the fine flour being separated from the coarse flour or *rava*. The coarse flour, which is valued the most, sells at $1\frac{1}{4}$ d. (5 /6.) a pound, while the fine flour sells at 1d.(2 /3 a.) the pound. The refuse is not used for human food. Both the first and the second flours form the chief part of all festive Hindu dainties. Flour-grinders, of whom there are nine grinding-houses and

twelve shops in Maide or Flour row, make about 4s. (Rs. 2) a day in the busy marriage season and 2s. (Re. 1) a day at other times,

Grocery.

Retail grocers' shops are scattered all over the city. Almost every street has one or more. The chief centres of the grocery trade are four: in Bhavani ward, in Adte or Agents' row in Aditvar, in Moti Chauk or Pearl Square, and in the main street of Vetal ward. The Adtes or commission agents of Bhavani ward are Lingayat and Dakshani Vanis who receive consignments from Bombay and up-country merchants and sell them locally or send them to Bombay or other large markets. In no case do these agents keep goods in Poona more than a few days and they do business only on commission. The chief articles which pass through their hands are gul or raw sugar, oil, tobacco, ghi or clarified butter, and refined sugar. Their business is brisk both just before and just after the rains. During the rainy season, from June to October, they are almost idle. The grocers of the Aditvar and Vetal wards deal in all kinds of grocery, importing from Bombay and up-country trade centres but selling only in Poona. They have retail shops as well as large warehouses at which they do wholesale business. All are Gujarat Vanis chiefly Vaishnavs and are men of capital. Their yearly dealings average £10,000 to £15,000 (Rs. 1 - 1½ lakhs) and their yearly profits £200 to £500 (Rs. 2000-5000). Retail grocers, most of whom are Gujarat Vanis and a few are Brahmans, have capitals of £50 to £500 (Rs. 500 -5000), most of it their own, and make £2 to £5 (Rs. 20 - 50) a month. A grocer sits on a box or on a raised mud platform, keeps his articles arranged round him in baskets or bags, those most in demand within arm's length, oil in a leather jar, and costly articles and rarities hung overhead in bags with labels. Dry goods are served in waste paper or green leaves, and liquids in pots and bottles which the customer brings with him. Grocers look greasy and dirty and are slovenly in their business.

Metals.

An account of the Poona metal work, which is one of the chief industries of the city, is given in the Craft chapter. [See Part II pp. 174-185.] Poona has three leading metal marts in the main street of Aditvar ward south of the Pearl Square or Moti Chauk, further south near Subhansha's house, and in the main street of Vetal ward. The dealers are Kasars who do all the local business. The export of brass and copper vessels is carried on by Marwar and Gujarat Vanis, who are more pushing than the Kasars. The Pearl Square Kasars sell ready-made cooking and water pots. The Marwaris near Subhansha's tomb confine themselves mostly to the making of bells, small cups, *lotas*, saucers, and other castings, while the Gujaratis in Vetal Peth chiefly make large vessels. The vessels are arranged in tiers in the shops, the smaller articles being. hung from the roof in bundles. Two branch streets, both called. Taveali or Ironpan row, are given entirely to the making and sale of iron pots and pans of English sheet iron. The pots are made and sold in the same place, the shops and workhouses being in the same building. The business is in the hands of poor Marathas who borrow capital at twelve to twenty-four per cent a year, and, though they make a fair profit, generally spend all their earnings. Copper brass and iron sheeting is brought into Poona in large quantities. It is worked into all the forms and sizes of pots

required by Hindus and other classes for house use. The vessels are sent to the Nizam's dominions, the Berars, and the Bombay Karnatak. The export trade and the bulk of the profits are almost exclusively in the hands of the Marwar and Gujarat Vanis, the Kasar and Maratha workmen not making more than a comfortable living out of their calling. Metal sheets are sold only in the main street of the Vetal ward.

Cloth.

Poona City has three cloth markets: the Kapadganj or Cloth Store in the Aditvar ward, the Bohori-ali also in Aditvar ward, and the Kapadali and Cholkhan-ali or Bodice-row in Budhvar ward. The dealers in the Aditvar ward Kapadganj are all Marwaris. Those in Bohori-ali are chiefly Bohoras, with a few Marathas and Brahmans. The cloth-sellers in Budhvar ward are chiefly Shimpis. The Marwaris of the Aditvar Kapadganj are the largest traders. They do business both wholesale and retail and almost exclusively in hand-made cloth. The chief marts from which cloth is brought are Nagpur Ahmadabad and Dharwar for the finer cotton-goods, Yeola and the local looms for silks and embroidered cloth, and Sholapur for the rougher waist-cloths and robes used by the poorer classes. The Shimpis of Budhvar ward also deal in the poorer kinds of handwoven cloth. They supply the middle and low class demand, and the Marwar Vanis supply the rich. The Bohonis and other dealers of the Bohori-ali sell all kinds of European piece-goods as well as the produce of the Bombay mills. Kinkhabs or embroidered silks and coloured China and European silks are also sold by the Bohoras. The Shimpis of Cholkhan-ali or Bodice-row sell nothing but the variegated cloth of which Hindu women make their bodiees. There is more variety in the colour, making, striping, and bordering of bodicecloth than of any other cloth. A cloth-merchant's shop generally consists of an outer or shop room and an inner room used as a godown or store. The shop is scrupulously clean, and cushions are spread round the foot of the walls for customers to sit on and lean against. The goods are kept in shelves along the walls. The shop fronts are shaded by red curtains which keep off the glare and dust and by causing a mellow ruddy light show articles, especially coloured goods, to advantage. All the leading cloth merchants of Poona are men of capital and do a large business. Minor dealers work with borrowed capital. The profits vary greatly according to individual dealings perhaps from £1 to £40 (Rs. 10 - 400) a month.

Jewelry.

Small silver and gold articles of personal decoration are sold in Moti Chauk or Pearl Square street in Aditvar ward by Sonars, Gujarat Vanis, and a few Brahmans. Old ornaments are also bought, re-made, cleaned, and sold. The more expensive jewelry, pearls diamonds and other precious stones, are sold by jewellers who have no regular shops but whose houses are well known. They generally sell at their own houses, but when required carry articles to their customers. Moti Chauk has about fifty shops, in which necklets anklets bracelets, and ear and nose rings are shown on stools, and the richer ornaments in glass cases. The shopkeepers squat on cushions and their shops are always neat. Trade is brisk during the marriage season. They are not men of capital, but their business yields them a comfortable living.

Timber.

At two markets in Poona City building timber is sold. One is in the west end of Sadashiv ward, the other is in Pangul row in Ganesh ward, the main and east streets on the borders of the Nagjhari stream. Timber is sold in logs as brought from the forest. Except heavy logs which are laid flat on the ground, the timber for sale is set on. end in lines in large enclosures leaning against walls or on poles stretched on supports. Teak is the chief timber. As no local teak of any size is available, Maulmain or Malabar teak is brought by rail from Bombay. The Maratha timber-dealers of Sadashiv ward deal only in local teak and old timber. The timber-dealers of Ganesh ward are Konkan Musalmans who deal both in imported and in local teak. Timber is generally sold by the piece or log, the cubic measurement being taken only in dealings with Government. About forty-seven timber-dealers make £50 to £200 (Its. 500 -2000) a year.

Snuff and Tobacco.

Poona has the largest snuff and tobacco market in the Deccan. About seventy-five tons (2108 Bengal *mans*) of tobacco are brought every year from the Kanarese and Deccan districts. It is cured, cat,; dressed, and spiced for chewing or ground into snuff. The Tambakhu row in Shukravar ward and the two Tapkir rows in Budhvar and Shanvar are entirely given to the caring of tobacco. Large quantities of tobacco are used in Poona, the better classes who do not smoke chewing tobacco. Poona-made snuff is sent in large quantities to all parts of India. A tobacco or snuff shop differs little from a groeer's shop except that the curing and dressing of the tobacco or the pounding, into snuff is carried on in the shop itself. The leading tobacco dealers are Lingayat Vanis and Brahmans, the Brahmans confining themselves chiefly to snuff-making. The Lingayats do more business than the Brahmans and earn £40 to £80 (Its. 400 - 800) a year. The Brahman snuff-makers make £20 to £40 (Its. 200 - 400). All classes take snuff, especially Brahmans and elderly women of other castes.

Stationery.

Poona has two markets for the sale of stationery, one in Budhvar main street and the other in the Bohori-ali of Aditvar main street. These shops sell a mixture of stationery, peddlery, and haberdashery. The business was formerly wholly in the hands of Bohoras, but of late a number of Brahmans have opened stationery and haberdashery shope as being easy to manage and requiring little training. Stationers show their wares in cases, cupboards, or shelves, or hang them from the shop-roof. They make £1 10s. to £5 (Its. 15 - 50) a month.

Spice Sellers.

In the main street of Budhvar ward are the shops of Gandhis who sell scented oil, incense, perfumes, and preserved fruit. The oils are kept in leather jars and sold in small Indian-made glass phials shaped like wine decanters. Dry perfumes are served wrapped in paper, and peaches and other preserved fruit are kept in lacquered earthen jars Gandhis

make high profits in proportion to their capital, but their business is small and is confined almost entirely to festive times. About twenty-six Gandhis make £2 10s. to £7 10s. (Rs. 25 - 75) a month.

Flower Sellers.

The Flower Sellers, for which Poona is famous, have two regular markets. In an open veranda with a boarded floor the Phul-malis, generally the men, sit with baskets of flowers, according to the season, around them and a wet cloth spread in front of them. With a needle and thread they keep stringing garlands, nosegays, and bouquets, and attend to customers as they call. In the gardens round the city plots of flowering plants are regularly grown and let to Malis for the season's flowers. The Mali's wife and children pluck the flowers in the evening before they are fully open and carry them homo in baskets covered with green leaves, generally plantain leaves as plaintain leaves keep flowers cooler than other leaves. Next morning the Mali carries the baskets to his shop, strings them into garlands and wreaths, and sells them to customers. The flower-man is always busy at festive times. Of the two flower markets, one is in Budhvar ward opposite the site of the late Budhvar palace, the other is in Vetal ward which is known as Flower Square or *Ful-chauk*. About twenty-three Malis have flower shops in the two markets and earn £1 to £1 10s. (Rs. 10-15) a month.

Animals.

The Poona Cattle Market is held in open ground at Bhamburda village close to the west of the city. It is held on Wednesday and Sunday afternoons. The animals sold are bullocks, buffaloes, cows, ponies, sheep, and goats. About 100 bullocks, 40 buffaloes, 25 ponies, and 90 goats are brought to market on each market day. Bargains are made through *dalals* or brokers.

Management.

The details regarding the management of the city come under four heads civil, criminal, police, and municipal. The civil work is managed by three sub-judges, a Small Cause Court, and an arbitration court. The criminal work is managed by two stipendiary magistrates, one of the first and one of the second class, and three honorary magistrates, one of the first class and two of the third class, who hold their courts twice a week. The city police consists of one inspector, three chief constables, forty-two head constables, two mounted police and 198 constables. [Details are given above under Justice pp. 1-40.]

Municipality.

The Municipality was established in 1856-57 and the management of its affairs entrusted to a committee of thirty members, nine of whom were ex-officio Government officials and twenty-one non-official nominated members. In 1874 the number of the committee was raised to thirty-six of whom nine were ex-officio Government officials and twenty-seven were nominated members. In April 1883 the number was fixed at twenty-eight

members, twelve elected, seven nominated, and nine ex-officio Government officials to be ultimately reduced to five, when the committee will consist of twenty-four members. The executive administration is entrusted to a managing committee of seven elected members. The managing body elect one of their members as chairman who holds office for one year. The general body holds four quarterly meetings and the managing committee meets once a week. The municipality has an executive salaried staff of four, a secretary, an engineer with fourteen subordinates, a health officer with nine subordinates, and a superintendent of octroi with seventy subordinates. The monthly establishment charges amount to about £226 (Rs. 2260). The following table shows the municipal income, its sources, and incidence from 1858

Poona City Municipal Revenue, 1858-1883.

| | | | | | | | | | 1 |
|-------------|---------|-----|------------|-------|---------|---------|------------|-----------|--|
| YEAR. | DIRECT | TAX | ΑTI | ON. | INDIRE | DEMARKS | | | |
| | Amount. | | Incidence. | | Amount. | | Incidence. | | REMARKS. |
| | £. | S. | S. | d. | £. | S. | 8. | d. | |
| 1858- 59 | | | | | (a)2573 | 1 4 | 0 | 6 1/8 | (a) Toll established. |
| 1859- 60 | | | ! | -1 | 2970 | 2 | 0 | 81/4 | |
| 1860- 61 | | | | | 3263 | 1 6 | 0 | 8 5/8 | (b) Government |
| 1861- 62 | | | | | 3110 | 1 2 | 0 | 81/4 | contribution being residue of municipal funds. |
| 1862- 63 | | | | | 3145 | 1 6 | 0 | 8 3/8 | |
| 1863- 64 | | | | | 2815 | 6 | 0 | 7 5/8 | |
| 1864- 65 | 1 | | - | 1 | 2730 | 2 | 0 | 71/4 | |
| 1865- 66 | | | - | | 3191 | 1 4 | 0 | 8 3/8 | |
| 1866- 67 | (c)2503 | 1 8 | 0 | 6 5/8 | 3571 | 0 | 0 | 8 5/8 | (c) House tax |
| 1867- 68 | 2553 | 1 0 | 0 | 63/4 | 4620 | 0 | 0 | 11 3⁄4 | imposed. |
| 1868- | 2946 | 4 | 0 | 73/4 | 4350 | 0 | 0 | 11 | |

| 69 | | | | | | | | 1/2 | |
|-------------|---------|--------|---|----------------------------------|-----------|--------|---|---------|---------------------------|
| 1869- 70 | 1737 | 1 4 | 0 | 4 5/8 | (d)10,801 | 0 | 2 | 4 1/8 | (d) Octroi substituted |
| 1870- 71 | 1965 | 0 | 0 | 51/8 | 11,418 | 0 | 2 | 51/8 | in place of toll. |
| 1871- 72 | 742 | 1 4 | 0 | 2 | 9130 | 0 | 2 | 1/4 | |
| 1872- 73 | 1364 | 8 | 0 | 3 5/8 | 8087 | 1 6 | 1 | 9 | |
| 1873- 74 | 2767 | 1 0 | 0 | 7 ³ / ₈ | 8010 | 0 | 1 | 83/4 | |
| 1874- 75 | 2096 | 8 | 0 | 5½ | 7810 | 0 | 1 | 8½ | |
| 1875- 76 | (e)2943 | 1 4 | 0 | 8 1/8 | 9252 | 1 0 | 2 | 3/8 | (e) Water rate imposed, |
| 1876- 77 | (f)3286 | 1 6 | 0 | 83/4 | 10,687 | 6 | 3 | 1/4 | (f) Wheel tax |
| 1877- 78 | 3238 | 1 6 | 0 | 81/2 | 8546 | 8 | 1 | 10 ½ | imposed. |
| 1878- 79 | (g)4294 | 8 | 0 | 11 3/8 | 9944 | 1 0 | 2 | 2 1/8 | (g) Privy cess imposed. |
| 1879- 80 | 5651 | 6 | 1 | 1 5⁄8 | 9721 | 6 | 2 | 1 1/8 | (h) Poudrette |
| 1880- 81 | 6348 | 6 | 1 | 3 3/8 | 9949 | 1 2 | 2 | 0 | manufacture established. |
| 1881- 82 | 6680 | 2 | 1 | 4 | 12,383 | 0 | 2 | 53/4 | |
| 1882- 83 | 6030 | 1 6 | 1 | 21/4 | 12,698 | 8 | 2 | 6½ | |

continued..

| YEAR. | MISCELLANI | EOUS. | TOTA | REMARKS. | |
|--------|------------|------------|---------|------------|----------|
| I EAK. | Amount. | Incidence. | Amount. | Incidence. | REMARKS. |

| | | | 1 | | T | | 1 | 1 | |
|-------------|---------|--------|----|----------|------------|--------|---|--------|---|
| | £ | s. | s. | d. | £ | S. | 8 | d. | |
| 1858- 59 | 226 | 1 6 | 0 | 5/8 | 2800 | 1 0 | 0 | 7 1/8 | (a) Toll established. |
| 1859- 60 | 197 | 4 | 0 | 1/2 | 3167 | 6 | 0 | 8 | |
| 1860- 61 | (b)1241 | 1 6 | 0 | 3 5/8 | 4505 | 1 2 | 0 | 11 3/8 | (b) Government |
| 1861- 62 | 270 | 1 2 | 0 | 5/8 | 3381 | 4 | 0 | 83/4 | contribution being residue of municipal |
| 1862- 63 | 185 | 8 | 0 | 1/2 | 3331 | 4 | 0 | 8 3/8 | funds. |
| 1863- 64 | 263 | 2 | 0 | 3/4 | 3078 | 8 | 0 | 8 5/8 | |
| 1864- 65 | 418 | 1 8 | 0 | 1 | 3149 | 0 | 0 | 8 3/8 | |
| 1865- 66 | 696 | 1 0 | 0 | 2 5⁄8 | 3788 | 4 | 0 | 9½ | |
| 1866- 67 | 531 | 8 | 0 | 11/4 | 6006 | 6 | 1 | 41/4 | (c) House tax imposed. |
| 1867- 68 | 371 | 6 | 0 | 7/8 | 7444 | 1 6 | 1 | 7 | |
| 1868- 69 | 506 | 1 0 | 0 | 11/4 | 7802 | 1 4 | 1 | 8 | |
| 1869- 70 | 444 | 2 | 0 | 1 1/8 | 12,98 2 | 1 6 | 2 | 81/4 | (d) Octroi substituted in |
| 1870- 71 | 712 | 6 | 0 | 13⁄4 | 14,09 5 | 1 6 | 2 | 9 1/8 | place of toll. |
| 1871- 72 | 882 | 6 | 1 | 31/4 | 10,75 5 | 6 | 3 | 5½ | |
| 1872- 73 | 861 | 1 6 | 0 | 2 1/8 | 10,31 4 | 0 | 2 | 31/2 | |
| 1873- 74 | 671 | 1 2 | 0 | 13⁄4 | 11,44 9 | 2 | 2 | 5 | |
| 1874- 75 | 763 | 4 | 0 | 2 | 10,66 9 | 1 2 | 2 | 4 3/8 | |

| 1875- 76 | 838 | 6 | 0 | 3 7⁄8 | 13,03 4 | 1 0 | 2 | 101/4 | (e) Water rate imposed, |
|-------------|---------|--------|---|----------|------------|--------|---|-----------|---------------------------|
| 1876- 77 | 839 | 1 8 | 0 | 2 1/8 | 14,81 4 | 0 | 3 | 11 5/8 | (f) Wheel tax imposed. |
| 1877- 78 | 820 | 1 0 | 0 | 2 1/8 | 12,60 5 | 1 4 | 2 | 7½ | |
| 1878- 79 | 1125 | 1 8 | 0 | 2 7⁄8 | 15,36 4 | 1 6 | 3 | 31/4 | (g) Privy cess imposed. |
| 1879- 80 | (h) 688 | 1 2 | 0 | 3 7⁄8 | 16,96 1 | 4 | 3 | 6½ | (h) Poudrette manufacture |
| 1880- 81 | 1999 | 0 | 0 | 43/4 | 18,29 6 | 1 8 | 3 | 8 1/8 | established. |
| 1881- 82 | 4118 | 1 4 | 0 | 9 7⁄8 | 23,18 | 1 6 | 4 | 7 1/8 | |
| 1882- 83 | 4574 | 1 6 | 0 | 11 | 23,30 4 | 0 | 4 | 8 1/8 | |

The 1858-59 income began with £2800 (Rs. 28,000) chiefly from tolls. In 1860-61 it rose to £4505 (Rs. 45,050) chiefly from a Government contribution of £1242 (Rs. 12,420). In 1860-67 a house-tax yielding £2504 (Rs. 25,040) was imposed and the income rose to £6606 (Rs. 66,060). In 1869-70 octroi took the place of tolls and the income rose to £12,983 (Rs. 1,29,830). In 1875-76 a water-rate was imposed and the farming system, which had brought down octroi from £10,801 to £7810 (Rs. 1,08,010-Rs.78,100) in 1874-75 was abolished. The water-rate was imposed to meet a new liability of £1000 (Rs. 10,000) which the municipality incurred by entering into a contract with Government for water from the Mutha canal which had just been opened. In 1876 the proceeds of a wheel-tax and the departmental collection of octroi brought up the income to £14,814 (Rs. 1,48,140). In 1878-79 a privy cess was imposed and a poudrette manufacture started in 1879-80. From £16,961 (Rs. 1,69,610) in 1879-80 the income rose to £23,304 (Rs. 2,33,040) in 1882-83 the chief increase being from octroi and poudrette, the income from poudrette alone being £4574 (Rs. 45,740) as the demand for manure rose greatly with the increase in wet cultivation due to the opening of the Mutha canal. Since 1882-83 the price of molasses has fallen, sugar cultivation has decreased, and with it the demand for poudrette.

The municipality maintains four fire engines, contributes yearly £500 (Rs. 5000) towards the cost of the city police and lights the city roads at a yearly cost of £1000 (Rs. 10,000). Tie city conservancy is done by manual labour. The streets are daily swept by women sweepers and the garbage and house refuse are gathered in 300 dust-bins placed at convenient distances along the streets. From the bins the sweepings are partly sold to potters and partly carted to a store half a mile to the south of the city, where they are piled in heaps and burnt to ashes. The potters remove the rubbish to their kilns on their own

donkeys and pay the municipality £500 to £000 (Rs. 5000 - 6000) a year. The ashes prepared at the store are carted to the poudrette works. The municipality maintains 150 road sweepers and twenty-five dry rubbish carts for road sweepings and garbage which they cart at a cost of £140 (Rs. 1400). At a yearly cost of £3500 (Rs. 35,000) the municipality employs 280 scavengers to collect nightsoil from 7800 private privies and fifty-four public latrines with 286 seats, and twenty-eight iron barrel carts to remove the nightsoil to the poudrette works. The nightsoil and ashes are mixed in. open beds at the works and exposed to the sun to be dried. The deposit is daily raked up and a little fresh ashes are added at each raking. When dry, the mixture becomes inoffensive to smell or sight. The proceeds of the poudrette, of which about 6000 tons are yearly turned out, amount to £360p (Rs. 36,000) against a total conservancy charge of £5000 (Rs. 50,000).

The municipality has moved thirty-six potters' kilns and twenty-eight tanneries outside municipal limits, and has placed under control dyers butchers and others who practise the less offensive trades and has confined them to particular places. Six slaughter-houses and meat markets have been built in convenient places; three burial grounds are provided on three sides outside municipal limits, and two burning grounds have been built on the Mutha bank one for Brahmans near the Omkareshvar temple, and the other for Marathas and others near the Lakdi Pul to the south-west of the city. The old burning ground was near the meeting of the Mula-Mutha. Within the city are seventy-two partly used burial grounds. Most of them are used by Muhammadans, five or six by low caste Hindus, and two by Christians. It is hoped that these burial grounds may be closed by degrees. The registration of births and deaths has been made compulsory, and the registers showed a death-rate in 1882-83 of twenty-four to the thousand. About 3000 children are yearly vaccinated by two municipal vaccinators.

Drainage.

Two-thirds of the city, including the nine wards to the west of the Nagjhari stream, have under-ground sewers into which house and privy drains carry the sullage and liquid discharges. The sewers empty into an intercepting drain $2\frac{1}{2}$ feet broad and $4\frac{1}{2}$ feet deep arched over on the top. The intercepting drain called the Gandha Nala is carried along the river bank from one end to the other of the city where it discharges into the river. One sewer discharges into the Nagjhari stream itself. The sewers are faulty in shape and material and do not work well. They are either mere rectangular cuts or channels in the ground varying from six to eighteen inches in size, lined with stone without cement, and covered with loose slabs or irregular blocks of stone. The sewers have often to be opened and cleared of the solid deposit which continually gathers in them and oozes into the adjacent ground. The eastern third of the city has no sewers. A new drainage scheme designed on the latest scientific principles is now under the consideration of the municipality.

Where there are no sewers, the sullage is gathered outside each house in a pit, and removed to gardens outside municipal limits. The sewers were built with the aqueducts about 1782 by Madhavrav the seventh Peshwa (1774 -1795).

The natural drainage of the city is good and the surface of the streets and gullies is completely washed every rainy season. This yearly washing adds greatly to the cleanness and healthiness of the city. The city has a fall from south to north of about seventy feet, being fifty feet a mile. The westmost part slopes west into the Ambil Odha stream which runs south-east to north-west a long the western limits of the city. In the heart of the city the Nagjhari stream, which rises in the hills 1½ miles to the south of the city, runs through it from south to north, and drains both banks for half a mile on either side. The eastern half mile of the city drains into the Manik stream which runs south to north and forms the eastern boundary of the city.

Roads.

The city has thirty-eight miles of made roads fifteen to forty feet wide, and sixteen miles of lanes and alleys varying from six to fifteen feet wide. The roads are metalled, the chief roads yearly, and the others as they wear out every second third or fourth year. The yearly cost of maintenance is £2000 (Rs. 20,000). The chief alleys are gravelled every year, and the minor lanes every second year at a yearly cost of £200 (Rs. 2000). The chief streets are watered from the beginning of February to the end of June at a yearly cost of £300 (Its. 3000). All the streets and lanes are lighted on dark nights at a cost of £1000 (Us. 10,000) with 660 kerosine lamps placed about 120 yards apart.

Water Supply.

The city has an abundant water-supply. It has 1290 wells, but except some in gardens and in the outskirts of the city, though used more or less for washing and bathing, all are brackish and unfit for drinking. The Mutha, which skirts the city for two miles on its north and west boundaries, is also largely used for washing and bathing and affords almost the only water for cattle. Since the opening of the Mutha canal along the high ground to the south of the city the Nagjhari stream which crosses the city, and the Manik stream which forms its eastern boundary, hold water throughout the year and are largely used for washing and bathing. Where within reach the runnels from the canal are also used for washing and bathing.

The drinking water comes from four private aqueducts and from the Mutha canal. It is now pretty evenly distributed over the city though parts of Shukravar, Vetal, Ganj, Ghorpade, Bhavani, Nana, Rastia Nyahal, Somvar, and Mangalvar wards have a scantier supply than the low-lying southern and northern wards. The water is delivered in to dipping wells, and, where abundant, is used for bathing and washing The city has eighty-four dipping wells and seventy-five stand-pipes and 1150 houses have water laid on to them. The four private aqueducts are the Katraj with a daily supply of 650,000 gallons, the Chaudhari aqueduct of 50,000 gallons, the Nana Fadnavis aqueduct of 100,000 gallons, and the Rastia aqueduct of 50,000 gallons. The Mutha canal gives a supply of 650,000 gallons, making a total daily supply of 1,500,000 gallons that is a daily average of fifteen gallons a head.

Aqueducts.

The Katraj aqueduct was built about 1750 by the third Peshwa Balaji Bajirav (1740-1761). The source of the aqueduct is in two ponds impounded by masonry dams in the Katraj valley four miles south of the city. The two ponds, which lie one below the other, the upper feeding the lower, are fed by the drainage of the valley through sluices. The water of the first floods is carried off by diverting channels cut along the pond sides and only the water of the latter rains is taken. The supply of the ponds does not wholly depend on the impounded water, as much of it comes from springs in the pond beds. The springs are caught in a masonry duct at the bottom of the lower pond and let into the channel of the aqueduct. The water of the ponds passes into the aqueduct by six-inch openings in the dam, the openings being two feet apart along the dam face. The aqueduct is an arched masonry work about 2' 6" wide, six feet high, and over four miles long. It is large enough for men to walk through and work in when removing silt or making repairs. The line of the duct is intercepted at about every 100 yards by seventy wells sunk four to ten feet below the level of the bottom of the duct, and raised a few feet above the surface of the ground. The wells act as air shafts and settling ponds where the silt is laid and the pure water allowed to pass into the duct. In every fourth or fifth well, the outlet of the duct is blocked with masonry, the discharge of the water being regulated through holes three to six inches in diameter. The aqueduct has a greatest discharge of a water volume of a sectional area of about 144 square inches, and ordinarily of six to 7½ square inches or three gallons a second. As a break of head occurs at each intercepting well the flow of water is small. As much of the channel is cut to a considerable depth below the ground, it taps numerous small springs along its course, and in three or four places has water let into it from independent wells by its side. As a feeder to the Katraj aqueduct and a place of recreation and ornament, Balaji Bajirav the third Peshwa (1740-1761) built in 1755 the Parvati lake at the south-west corner of the city, by scooping out and enlarging the Ambil Odha stream and clearing for the lake a space measuring 550 yards by 225 containing twenty-five acres. [Details are given below under Parvati Lake (91).] The Ambil Odha stream has been dammed and diverted, and sluices provided in the dam to fill the lake from the floods of the stream, Three smaller lakes are formed in the old channel, where the lotus plant is largely grown for its flowers. The surplus discharge from, the Katraj aqueduct finds an outlet into the Parvati lake which also serves as a feeder to the aqueduct when the Katraj lake or aqueduct is under repair.

The Nana Fadnavis aqueduct was built about the year 1790 by Nana Fadnavis. It is a small work and supplies only two dipping wells and the Vishrambag palace(40). The aqueduct is brought from a well in Narhe Ambegaon village six miles south of the city, and is built in the same style as the Katraj aqueduct, but smaller, consisting of nine-inch tiles embedded in masonry. The Rastia and Chaudhari aqueducts are built like the Nana "Fadnavis aqueduct. Both rise from springs in Kondva village seven miles south-west of the city, and are led to public dipping wells near the Rastia and Chaudhari mansions. The date of both is somewhat later than that of Nana's duct. The municipality maintains only the Katraj aqueduct. The three other ducts are maintained by the descendants of Nana, Rastia, and Chaudhari.

Mutha Canal Supply.

The [Contributed by Mr. W. Clerke, M.Inst. C.E.] Mutha canal supplies both the city and the cantonment of Poona with drinking water. There are two distinct systems of supply, one for the city the other for the cantonment. The supply for the city is taken off one mile to the east of Parvati hill, strained through filter beds of sand and charcoal and distributed in iron pipes throughout the city.

The chief part of the cantonment supply of drinking water is drawn from the canal about 200 yards east of St. Mary's church (109). The water-supply arrangements include four parts: (1) a water wheel which furnishes the motive power; (2) a system of pumps by which the water from the canal is pumped into the settling ponds and the filtered water is pumped about 770 yards south into the middle, and about 450 yards further south into the upper service, reservoirs; (3) settling ponds and filter beds with distributing mains; and (4) middle and upper service reservoirs with distributing mains. The water wheel, of about fifty horse-power, is of the form known as Poncelet's undershot wheel. It is sixteen feet in diameter and thirteen feet broad. It stands in the bed of the canal which at this point is given a drop of 2.75 feet to-obtain the necessary head of water. The pumps, which consist of a set of three centrifugal pumps and a pair of three throw force pumps are placed in a corrugated iron shed on the left hand of the canal; the power is passed from the wheel to the pumps by a system of spur and bevelled gearing and belting. The centrifugal pumps send the water from the canal into the settling ponds and the filtered water from- the dispense cistern into the middle service reservoir. The force pumps are used for sending the filtered water about 1200 yards south into the upper service reservoir which is too high to be reached by the centrifugal pumps. In the shed with the pumps a horizontal steam engine of about twenty-five nominal horse-power is also fitted up which can be geared on to work the pumps if any accident happens to the water wheel or the canal. The settling pond and filter beds are about twenty yards from the canal on its right bank. They consist of two settling ponds built of rubble masonry each 100 feet long by eighty feet broad and eleven feet deep, into which the water from the canal is forced by the centrifugal pumps through main pipes laid across the canal. The filter beds, which are on the north or canal side of the settling ponds, are two rubble masonry cisterns each 100 feet long by seventy broad and seven deep to the top of the filtering material, a four feet thick bed of sand and charcoal. The water is led from the settling ponds by an arrangement of pipes and valves into each of the filter beds through a semicircular haud or cistern the lip of which is level with the top of the filter bed. The water passes through the sand and charcoal of the filter bed and is gathered in porous pipe drains and led into the dispense cistern (100' x 20') which lies between the two filter beds. From the dispense cistern the filtered water is drawn off by two mains, one of which conveys water for distribution to the lower part of the cantonment and the other carries the filtered water to the pumps by which it is pumped about 770 yards south to the middle and about 450 yards further south to the upper service reservoirs. The middle service reservoir at the Vanavdi Barracks (116), about 770 yards south of the filter beds, is built of rubble masonry in the form of a regular pentagon each side 100 feet long. Its flooring is of concrete and the depth of water is ten feet; in the centre is a masonry pillar from which wire ropes stretch to the sides, and over the wire ropes is laid a corrugated iron covering. From the reservoir the water is led by a nine-inch main pipe for distribution in the higher parts of the cantonment not commanded by the dispense cistern. The upper service

reservoir is about 450 yards further south near the Military Prison (85), and, except that its sides are only fifty feet long, it is in every respect like the middle service reservoir. From the upper service reservoir the water is led by a six-inch main for distribution in the Vanavdi Barracks and in a few parts of the cantonment which are too high to be commanded by the middle service reservoir. In addition to these arrangements water is drawn direct from the canal near the end of East Street into a settling pond (120'X 60'x 8') from which it is passed through a filter and drawn off by a twelve-inch main for distribution in the lower parts of the Sadar Bazar. The daily city consumption from both the canal and the aqueducts is during the cold weather (1884) about 500,000 gallons and in the hot weather about 600,000 gallons. The existing arrangements are capable of meeting a daily demand of about 1,000,000 gallons. The municipality pays £1000 (Rs. 10,000) a year to Government for the canal water, provided the daily quantity drawn does not exceed 750,000 gallons. Excess water is paid for at 4½ d. (3 as.) the thousand gallons.

Medical Institutions.

Poona [Compare above Chapter XII. pp. 66-67.] has six medical institutions where medical aid is given free of charge. Two of them the Civil Hospital (101) beyond municipal limits and the Lunatic Asylum are Government institutions; two are municipal dispensaries in the Shanvar and Nana wards; and two, the Khan Bahadur Pestanji Sorabji Charitable Dispensary and the Sassoon Infirm Asylum (30) are works of private charity. Of private practitioners according to the English system of medicine three medical licentiates have dispensaries and several, chiefly retired Government servants, give medical advice, the medicine being obtained from three dispensing shops, two in Budhvar and one in Aditvar ward. The city has many practitioners of native medicine sixof whom, one of them a Musalman, enjoy large practice. The Civil Hospital is in a building near the railway station called after the late Mr. David Sassoon who contributed largely towards its construction. It has a senior and a junior surgeon, a resident apothecary, a matron, and two assistant surgeons, lecturers to vernacular medical classes attached to the hospital and in charge of in-door patients. The daily average attendance at the hospital is 162 of whom ninety-four are in-door patients. The Civil Surgeon is also in charge of the Lunatic Asylum which is in a Government building within municipal limits, and has a resident hospital assistant. It has an average of sixty lunatics. The Khan Bahadur Pestanji Sorabji Charitable Dispensary, endowed by the gentleman whose name it bears, is maintained by Government and is in charge of an assistant surgeon. The daily attendance averages 115. The two municipal dispensaries in the Shanvar and Nana wards take no in-patients. The daily out-door attendance is 120 in the Shanvar ward and eighty in the Nana ward dispensary. The Sassoon Infirm Asylum (30), started by the late Mr. David Sassoon and managed by a committee, has sixty-five inmates. It is maintained from the interest of a fund of £5500 (Its. 55,000) mostly contributed by Mr. Sassoon and a yearly municipal contribution of £120 (Rs. 1200).

Educational Institutions.

Poona City has 116 educational institutions, twenty-four of them Government and ninety-four private. Of the twenty-four Government institutions four are colleges and twenty are

schools. Of the four colleges one is an Arts College with 140 pupils and a daily average attendance of 122; one is a Science College in three divisions with 138 pupils and a daily attendance of 118; and two are vernacular Training Colleges, one for boys with 127 pupils and a daily average attendance of 106, and the other for girls with forty-six pupils and a daily average attendance of thirty-one. Of the twenty schools one is a High School with 597 pupils and a daily average attendance of 588; one is the Bairamji medical school with sixty-two pupils and a daily average attendance of fifty-nine; one is a female practising school with sixty-nine pupils and a daily average attendance of fifty-three; one is a Marathi preparatory school with 277 pupils and a daily average attendance of 227; five are vernacular girl schools with 301 pupils and a daily average attendance of 215; two are Hindustani schools with fifty-three pupils and a daily average attendance of thirty-seven; one is a low caste primary school with thirty-three pupils and a daily average attendance of twenty-two; and eight are Marathi schools with 1522 pupils and a daily average attendance of 1366. Of the ninety-four private institutions, except one Arts college started in January 1885 all are schools, eighty-five of them Native and seven Missionary, of the eighty-five Native schools two are High schools, one the Native Institution with 197 pupils and a daily average attendance of 155 and the other the New English School with 1200 pupils and a daily average attendance of about 1000; one is a high school for native girls and ladies with about seventy pupils started in January 1885; one is 'a drawing or Arts' school with about ten pupils and a daily average attendance of seven; fifteen are registered primary schools with 1079 pupils and a daily average attendant of 882; and sixty-seven are purely private primary schools with 3990 pupils and a daily average attendance of 3500. Of the seven Mission schools five belong to the Free Church Mission and two to the Society for the Propagation of the Gospel. Of the Free Church Mission schools one is a high school with 170 pupils and a daily average attendance of 158; one a vernacular school for boys with 172 pupils and a daily average attendance of 106; two are vernacular girls schools with 137 pupils and a daily average attendance of seventy-six; and one is an orphanage anglovernacular school with ten pupils and a daily average attendance of five. Of the two S. P. G. Mission schools one is a vernacular school with thirty-eight pupils and a daily average attendance of twenty-eight, and one an industrial school with fourteen pupils and a daily average attendance of eight. Details are given above in Chapter XI. pp. 55-61.]

Museum.

A museum was started in Poona by subscription about 1875 but was abandoned after a few years. The present museum has 1650 articles chiefly specimens of geology, chemistry, and Indian arts and manufactures. Exhibitions of local arts and manufactures are held every second year and the surplus proceeds in cash and articles are transferred to the museum. The municipality contributes £20 (Rs. 200) a year towards its maintenance.

Library.

The Native General Library, maintained by private subscriptions and donations, has about 100 subscribers whose monthly subscriptions amount to about £6 (Rs. 60). The library had 5700 works worth £2500 (Rs. 25,000), which were burnt in the Budhvar

Palace fire of 1879. Subscriptions have been raised and a fund formed for a new building to which the municipality has largely contributed. A book fund has been started to which also the Municipality has contributed £50 (Rs. 500). Attached to the library is a reading room. The city has two other small reading rooms.

Newspapers.

Nine newspapers are published in Poona, two of which are daily English, one Anglo-Vernacular half-weekly, and six weekly one English one Anglo-Vernacular and four Marathi.

Objects.

The city has, within municipal limits, forty objects chiefly palaces and mansions from a hundred to three hundred years old.

Ambarkhana (1).

[Contributed by Rav Saheb Narso Ramchandra Godbole.] The AMBARKHANA, literally the Elephant-carriage house, in Kasba ward, originally known as Lal Mahal or the Red Mansion, was built in 1636 to the south of Poona fort by Shahaji for the use of his wife Jijibai and her son Shivaji (1627-1680) then a boy of twelve. It was strongly built and had many under-ground rooms, some of which remain. Shivaji and his mother lived for several years in this mansion under the care of Shahaji's manager Dadaji Kondadev who had charge of Shivaji's education. The name Ambarkhana or Elephant-car House was given to the palace under the Peshwas when it was turned into a store-house for elephant cars or *ambaris*.

Amriteshvar's Temple (2)

AMRITESHVAR'S TEMPLE, close to the Mutha river in the Shanvar ward was built by Bhiubai wife of Abaji Baramatikar and sister of Bajirav Ballal the second Peshwa (1721-1740). The temple is a solid stone building raised twelve to twenty feet to keep it above the river floods. It is reached by a flight of steps on the east. The shrine has a *ling* and a bull outside. On one side, overlooking the river, is a hall which is used for meetings. The temple enjoys a monthly grant of £1 10s. (Rs. 15) from the Parvati temple revenue.

Anandodbhav Theatre (3)

The ANANDODBHAV or Gaiety Theatre, in Budhvar ward, was built in 1863-64 by a Sonar named Krishnashet son of Narayanshet. The site elonged to the mansion of the great Tambekar bankers. The last of the Tambekar family pulled down the house and sold the materials and the site. The site was bought by the present owner and the theatre was built at a cost of £950 (Its. 9500). It was the first theatre in Poona, and, being in a central position, is largely used. Public meetings are also occasionally held in it. The building, which has room for 800 people, is approached by a narrow path from the main Budhvar

road and has two other approaches from a side alley. The building is square with a sheet iron roof resting on a wooden frame work. It consists of a stage 792 square feet in area and a pit covering 928 square feet. The pit holds 150 chairs and has three tiers of galleries on its three sides each of which holds 200 seats.

Animal Home or Panjarpol (4)

The ANIMAL HOME or Panjarpol in Shanvar ward was founded in 1854 from subscriptions raised by the chief city merchants. The immediate cause of the founding of the home was a police order to catch stray bulls and kill stray dogs. The Gujarati inhabitants of the city formed a committee and took charge of all stray cattle and dogs, and since then the home has become a permanent institution. All animals, healthy, maimed, diseased or old, are received, though the rule is to attend only to the disabled and unserviceable. Except to the poor, admission fees are charged at the rate of £2 10s. (Rs. 25) on horses and 6s. (Rs. 3) on oxen cows and buffaloes. Birds are taken free of charge but any amount paid on their account is accepted. When necessary a Muhammadan farrier is called in to treat sick horses. The other animals are treated by the servants of the home. Healthy animals are given grass and the sick are fed on pulse and oilcake. Healthy animals are made to work for the home. After recovery animals are given free of charge to any one who asks for them and is able to keep them. The home has two meadows or kurans near the city, one for which a sum of £26 (Rs. 260) a year is paid, and the other which is mortgaged to the home for £250 (Rs. 2500) the home getting the grass as interest. The average expenses of cutting, carrying, and stacking the grass in each field amount to £20 (Rs. 200) a year. The produce of these two meadows suffices for the wants of the home. In 1879 the home had about 200 head of cattle and 100 birds. In May, when most of the cattle and two deer were away at the grazing grounds, the home had ten horses, one *nilgay*, a black buck, and an antelope in a stable about twenty peafowls in a square railed off at the end of the stable, three or four monkeys with running chains on a pole under a large, tree, two foxes, a hare, two rabbits, and a number of pigeons, some fowls, and a turkey. Besides these the home had one or two cows, a few goats, some bullocks, and sheep. Since 1879 neither the number nor the class of animals has materially changed. The home is managed by a committee of six of whom in 1879 four were Hindus and two were Parsis. The staff includes a secretary on £5 (Rs. 50) a month, two clerks on £1 10s. (Rs. 15) and £1 (Rs. 10) a month, and five or six servants each on 12s. (Rs. 6) a month. Two mesengers are kept to watch the fields, and during the rains two extra men are engaged. The home has a yearly revenue of about £150 (Rs. 1500) chiefly from cesses on groceries at $1\frac{1}{2}d$. (1 a.) a bag, on jewelry sales at $\frac{1}{4}$ per cent, on bills of exchange at ⁵/32 per cent, and on grain at ¹/64 per cent. The average yearly cost of the home is about £300 (Rs. 3000). Except in very good seasons the surplus expenditure of £150 (Rs. 1500) is partly met by a yearly contribution of £70 (Rs. 700) from the Bombay Animal Home and the rest by local yearly subscriptions amounting to £80 (Rs. 800). The home buildings consist of long lines of roofed stables along the walls of an open square yard. The stables are wide and railed off, and the office rooms are on either side immediately within the entrance gate. Servants and clerks live on the premises in small out-houses.

Aryabhushan Theatre (5)

The ARYABHUSHAN or Arya-ornament Theatre in Ganesh ward, was originally built as a rest-house on the borders of the old city near Dulya Maruti's temple. The theatre is close to and On the city side of the Nagihari stream which forms its eastern boundary. A water cistern or dipping well was also built near the rest-house for wayfarers. The building was afterwards used by the Peshwas for their periodical dinners to large gatherings of learned Brahmans. On the overthrow of the last Peshwa the building became the property of the state and, between 1818 and 1820, Captain Robertson, the Collector of Poona, gave it as a residence to his accountant a Mr. Houston. Until very lately the building was occupied by Mr. Houston's widow, who, in 1874, sold it for £105 (Rs. 10,500) and a further sum of £700 (Rs. 7000) was spent in turning it into a theatre. The front of the building is in three compartments, one behind the other, with an upper floor. The halls fronting the road are now used for a school. The two inner compartments form the stage with dressing and retiring side-rooms. At the back was a courtyard with open ground floor halls on three sides. The courtyard has been covered with a high tiled roof and forms the pit, while two storeys have been added to the side halls and they have been turned into galleries. The building is a plain wood and brick structure with a ground area of about 11,700 square feet. It holds an audience of 1200 and is the largest and most substantial of the city theatres.

Bel-Bag Temple (6)

BEL-BAG, in Budhvar ward, is a temple of Vishnu built by Nana Fadnavis (1764-1800). It was begun in 1765 and finished in 1769 at a cost of over £2500 (Rs. 25,000). The site, originally a garden known as Manis Mala, was used by the Peshwas for stables. Nana Fadnavis obtained the site for his temple, and, in 1779, secured the grant to the temple of the four villages of Vagsai in Poona, Galegaon in Ahmadnagar, and Pasarni and Vanegaon in Satara. In addition to these four villages Nana Fadnavis assigned to the temple some lands of his own. The income from these endowments, amounting to £500 (Rs. 5000) a year, was attached by Bajirav the last Peshwa from 1804 to 1818, and the management was entrusted to one Devasthale. Mr. Elphinstone restored the property and management to Nana's widow Jivabai in 1818 and the temple is now managed by her descendants. The temple is a small vaulted cut stone building covering not more than 1156 square feet with a conical spire and a small wooden hall with a terraced roof. In front an open yard of about 2000 square feet is used for special gatherings, when the yard is covered with canvas. On the other side of the yard is Garud on a small raised platform under a valuted canopy. On each side of the temple are two small shrines for Shiv and Ganpati. The open ground round the temple is laid out in garden plots for growing flowering shrubs and the basil or tulsi plant for the worship of the idol. Attached to the temples are houses for the priest and the manager. Nana Fadnavis, the founder of the temple, laid down strict and minute rules for its management, and every item of ordinary and extraordinary expenditure has been fixed. His directions have been followed with the greatest strictness.

Bhavani's Temple (7).

BHAVANI'S TEMPLE in Bhavani ward, was built about 1760 by public subscription at a cost of about £500 (Rs. 5000). The temple has the usual solid stone-built idol chamber or shrine with a portico and spire and a wooden hall or *sabhamandap*. Attached on one side is a rest-house. Except from offerings the temple has no income. A fair is held in the Navratra holidays in *Ashvin* or September-Ocetober. Low class Hindus revere Bhavani more than Brahmans do, and offer goats and sheep in fulfilment of vows.

Bohoras' Jamatkhana (8).

The BOHORAS' JAMATKHANA or Meeting House in Aditvar ward was built about 1730 by subscription at a cost of £1600 (Rs. 16,000). The buildings, which have since from time to time been enlarged and improved at a great cost, are large and fill four sides of a spacious quadrangle. The courtyard is entered by a massive door with a well carved wooden roof, and in the middle of the yard is a large cistern or haud with a central fountain. On the left is a large hall with plain square wooden pillars used for dinners on public feast days To the right is the mosque, a flat roofed hall, very closely hung with lamps and chandeliers. Above the mosque the building rises four storeys high, with steep stairs in the walls. This bunding is never- used except by the high priest or mulla of the Bohoras when he visits Poona. [He is generally the deputy of the Mulla Saheb or chief Pontiff whose head-quarters are in Surat. Of the Bohoras, who seem to be of part Gujarat Hindu and part Arabic origin and belong to the Ismaili sect of Shias, an account is given in the Population chapter, Part I.] On the roof two pavilions with tiled roofs command one of the best views of the city. The upper floors forming the residence of the mulla or high priest, overhang a thorough-fare, on the other side of which are public cisterns fed by the Katraj water-channel.

Budhvar Palace (9).

The BUDHVAR PALACE in Budhvar ward, which was burnt down on 13th May 1879, was a three-storeyed building (150'X 140') with one large and one small court or *chauk*. It was built for public offices by Bajirav the last Peshwa about 1813. The woodwork of the palace was very strong and the beams were broad enough for a man to sleep on with comfort. The large court was a handsome quadrangle surrounded by cloisters of carved wooden pillars. From 1818 the Government public offices were held in this palace, and since its destruction the municipality have laid out a small public garden on the site. Attached to the palace was a building of two *chauks* or quadrangles with one upper floor throughout and a second floor over a part called the *Faraskhana* where tents and horse and elephant gear were kept. It escaped the fire and is used as a police office and lock-up. Government have recently granted the palace site and the Faraskhana to the Deccan Education Society for their New English School and Fergusson College buildings, the foundation stone of which was laid on the 6th of March 1885 by His Excellency Sir James Fergusson, Bart. K.C.M.G., G.C.S.I., C.I.E.

City Jail (10).

The CITY JAIL in Shukravar ward was the head-quarters of Bajirav Peshwa's artillery and was in charge of the Panse family who held the hereditary command of the artillery. It was turned into a jail in 1818. The building was surrounded by a high fortified wall and a ditch which is now filled. Lines of cells, on the usual radiating plan, with a central watch-tower have been built and accommodation provided for the guard, the hospital, the office, and the jailer's residence, the last outside the entrance gate. Workshops and a garden are attached to the jail. The female prisoners have very recently been placed in an isolated ward. The water-supply of the jail is from the Katraj aqueduct. This jail will shortly be abolished and the prisoners transferred to the central jail at Yeravda.

Dulya Maruti's Temple (11).

DULYA or ROCKING MARUTI'S TEMPLE is in Ganesh ward near the Nagihari stream on the eastern boundary of the old city. This Rocking Maruti is one of the guardians of Poona, who gets his name because he rocked or swayed with grief while the Marathas were being destroyed on the fatal field of Panipat (1761). [The chief approaches to all villages and towns have temples of Maruti to guard the town against evil.] The first temple of Dulya Maruti was built about 1680 by Naro Anant Natu who also built Someshvar's temple in Aditvar ward. The building was repaired and enlarged about 1780 by Rakhmabai Johari a Brahman lady. A second temple of Balaji facing Maruti's was added about this time by Makna a Badhai or cabinet maker. About 1830 at a cost of £150 (Rs. 1500) both the temples were renewed and joined together by subscription among the people of Ganesh ward. The temple has a monthly grant of 8s. (Rs. 4) from the Parvati temple revenues and additional contributions are yearly raised in the ward for its support. The temple is in three compartments, the two shrines joined by a central audience hall or sabhamandap. The shrines are about twenty feet square and are built of solid cut stone. Each has one entrance door and paved platforms all round for the circuit or *pradakshina*. The roofs are vaulted and surmounted with conical spires about thirty feet high. The hall, including a central nave and side aisles, is a wood and brick structure with a tiled roof (35'x 24') and galleries over the nave for women to hear readings from holy books and sermons and song recitals.

Ganpati's Temple (12).

GANPATI'S TEMPLE in Kasba ward is said to have been a rude stone enclosure, first built by cowherds who saw a large piece of rock shaped like Ganpati and daubed it with redlead. When, about 1636, Shahaji built a palace at Poona, his wife Jijibai built a small stone temple to Ganpati close to the east of the site of the Ambarkhana palace (1). The temple is a small dark room covered with a roof which shelters barely the image and the worshipper. The god gradually rose in public esteem, and came to be and still is locally regarded as one of the town guardians whose blessings should be asked on all religious and social ceremonies and celebrations. A hall or *sabhamandap*. was added to the temple by the *athghares* or first eight Brahman families of Poona. [The first eight Brahman families in Poona are Bharange, Dharmadhikari, Dhere, Kalange, Kanade, Nilange, Thakar, and Vaidya.] The hall is a dark chamber with a small entrance at one end. The walls and roof are like those of the first temple, built of solid stone plastered with cement.

The Lakde family added a pavement all round the temple and a long upper-storeyed open shed on one side as a rest-house or place for caste dinners and gatherings. Mr. Gajananrav Sadashiv Dikshit, a Deccan Sardar, added another hall in continuation of the old hall. The new hall is entirely open, rests on plain wooden pillars, and has a tiled roof. In 1877 a public cistern was built in the temple yard. The temple enjoys a monthly allowance of 10s. (Es. 5) from the Parvati temple revenues, and the expenses of the yearly celebration of Ganpati's festival on *Ganesh Chaturthi* the bright fourth of *Bhadrapad* in August-September are also paid from the Parvati grant.

Ghodepir (13).

GHODEPIR or the HORSE SAINT in Nana Peth is a life-size horse of sawdust and paste plastered over with fine clay. A Musalman bier or *tabut* is built every year on the back of the horse. The horse is worshipped by low class Hindus when in trouble, and babyless women and mothers with sick children come and vow offerings and penances. Nana Fadnavis had a Muhammadan attendant named Nathubhai. After Nana's death, to preserve his master's name Nathubhai made a small clay horse which still remains and raised a bier calling it Nana's bier in Nana's ward outside a house known as Vanavle's. The horse gradually rose in public favour, and subscriptions came in and a site for the Horse Saint's house was bought. Nathubhai after wards became a trooper in the Southern Maratha Horse and such was his regard for his old master that he spent all his yearly earnings on the yearly bier. On Nathubhai's death, the people of Nana ward, with one Padval as their manager, subscribed to maintain the horse his house and his yearly mindfeast. The offerings at the shrine grew so large that no subscriptions were needed, and Padval remained in charge. The present yearly income from offerings is £150 (Rs. 1500) and the shrine is managed by the descendants of Padval. Two small shops have been built facing the horse, whose rents go towards the maintenance of the shrine. The present shrine, which is called the asurkhana or spirits' house, a plain tiled structure (50' x 24' x 25') of wood and brick, was built about 1845.

Jama Mosque (14).

The JAMA MOSQUE in Aditvar ward, the chief Muhammadan place of worship in the city, was built about 1839 by public subscription at a cost of about £1500 (Rs. 15,000). Since then from time to time additions have been made. The mosque consists of a large stone hall (60' x 30') with a dome. The back wall has a niche with a step against it, and is covered with texts from the Kuran. In front of the mosque is a well sanded yard with a fountain in the middle On one side is a washing cistern or *hand*. Attached to the mosque is a Persian school, a rest-house, and some dwellings whose rents go to the mosque fund. All Muhammadan social or religious meetings are held in this mosque.

Kotval Chavdi (15).

KOTVAL CHAVDI in Budhvar ward, in the middle of the main street which runs all round it, was the Peshwas police office. It is a one-storeyed house, the upper storey for offices and the ground floor for cells. The building was sold by auction for £110 (Rs.

1100) and is now made into stalls where a small market is held, and fruit, vegetables, grain, stationery, and groceries are sold. The building is now worth about £3000 (Rs. 30,000).

Moroba Dada's Vada (16).

MOROBA DADA'S MANSION in Budhvar ward was built by Moroba Dada Fadnavis, sometime prime minister of Savai Mdahavrav (1774-1795) the seventh Peshwa. It is a spacious mansion with six quadrangles or *chauks*. Opening on to the quadrangles or *chauks* instead of walls is ornamental wooden trellis work. Two of the quadrangles have water cisterns and until lately one was covered by a high wooden canopy. All the pillars are carved in the cypress or *suru* pattern, the intervening spaces being filled by cusped panel arches of thick wood. The mansion has throughout a wooden ceiling, and all the roofs are terraced. On the third floor is an ivory hall or *hasti-danti divankhana*, with ivory let into the ceiling and other parts of the room. The whole mansion is still in order and worth a visit.

Nageshvar's Temple (17).

NAGESHVAR'S TEMPLE in Somvar ward is believed to be the oldest temple in Poona, though neither its date nor its founder's name is known. Its style and the ornament on its tower seem to show that it belongs to Muhammadan times perhaps to about the end of the sixteenth century. The temple proper is a small close room of solid stone, with one door and a conical tower with embossed stone figures. The *ling*, which is said to be a natural rock, is about four feet below the outside level. Attached to the temple is the hall or *sabhamandap* open on three sides, a massive imposing building on wooden columns with a neatly finished wooden ceiling. A large space round the hall is enclosed and paved and rest-houses and a residence for the temple priest are built along the walls. The temple priest receives a monthly allowance of 11s.3d. (Rs. 55%) from the Parvati temple revenues. Large additions and changes, including a new smaller temple of Vishnu, were made about 1780 by one Aba Shelukar, and in 1878 by Mr. Raghupatrav Aurangabadkar who built public cisterns within and outside of the temple enclosure.

Narpatgir Temple (18).

The NARPATGIR TEMPLE in Somvar ward was built by Narpatgir Gosavi at a cost of £5000 (Rs. 50,000). The temple has a cistern and a fountain.

Narsoba's Temple (19).

NARSOBA'S TEMPLE in Karkolpura in Sadishiv ward, in the south- west corner of the city, was built about 1788 by one Ganu Joshi. The temple has a stone shrine with a spire and a wooden hall. On the doorway is a drum-house or *nagarkhana*. The object of worship is Narsinh or the man-lion the fourth form of Vishnu. The image has a lion's mouth and is shown tearing in pieces the demon Hiranya-Kashipu who lies in its lap. This form of Vishnu is seldom worshipped. The temple has a yearly income of about £40 (Rs.

400) chiefly from offerings. Vows of walking a number of times round, the shrine, usually a hundred thousand times, are made by women to get children or to get cured of evil spirits and bodily ailments.

New Market (20).

The NEW MARKET is a large central vegetable and fruit market now (August 1884) being built by the Poona Municipality in the heart of the city on a site of eight acres between the Tulsibag and Rameshvar temples in Shukravar ward. The main building is to be an octagonal tower in the middle, forty feet across, with radiating lines. The central tower is to have stalls on the ground and upper floors and its height to the pitch of the roof will be eighty feet. A clock tower 120 feet high is to be attached to the market. It is proposed to build ranges of stalls round the main building.

The site has been bought for £5000 (Rs. 50,000) and the cost of the main building is estimated at £15,000 (Rs. 1,50,000), while the extensions are estimated to cost about £20,000 (Rs. 2,00,000). The whole market when finished will have cost £40,000 (Rs. 4,00,000). It will be a handsome and substantial building. The roof is to be of machine made tiles, supported on teakwood frames and cast-iron columns. The main building will hold about 250 stalls, and the extensions about 350 more. Water is being laid on the building in iron pipes from the Khadakvasla canal.

Nivdungya Vithoba's Temple (21).

NIVDUNGYA VITHOBA'S TEMPLE in Nana ward was built by a Gosavi and rebuilt about 1830 by a Gujarati banker named Purshottam Ambadas at a cost of £3000 (Rs. 30,000). The image is called Nivdungya because it was found among prickly pear or *nivdung* bushes. The temple is very spacious and includes a cut-stone shrine with a spire and a wooden hall. Round the temple is a garden with a large public water cistern. Along the enclosure wall are cloister used for caste dinners. On the south side are some rooms fitted for dwellings and let to tenants. On the north is the residence of the priest. Over the gateway is a drum-house or *nagarkhana*. Outside the enclosure on the west is an open shed which is used as a rest-house by wandering beggars. On the south are ranges of shops and houses, the rent of which, amounting to about £50 (Rs. 500) a year, goes to the temple.

Nossa Senhora da Conceicao's Chuech (22).

NOSSA SENHORA DA CONCEICAO'S CHURCH in Nana ward is a brick building. It was opened on the 10th of July 1853 at a cost of about £950 (Rs. 9500), and has room for about 600, and a congregation of about 1950 mostly Portuguese medical practitioners, clerks, shopkeepers, tailors, and house servants. The church has a font, a harmonium, and three altars, a high altar dedicated to the Immaculate Conception of the Blessed Virgin Mary, and two side altars one dedicated to the Sacred Heart of Jesus and the other to St. Francis Xavier. Attached to the church is an Anglo-Portuguese day school with sixty pupils.

OMKARESHVAR'S TEMPLE, on the bank of the Mutha in Somvar ward to the northwest of the city, was built between 1740 and 1760 by one Krishnaji Pant Chitrav from funds raised from public subscription. Bhau Saheb or Sadashivrav Chimnaji contributed £100 (Rs. 1000) a month towards the cost for about six years while the work was in progress. The temple faces east and is reached by a large and imposing gateway in the middle of a high and massive fortified wall built in the Saracenic style. Over the gateway is a small music hall or *nagarkhana*. The gateway leads to a large paved courtyard with side ranges of brick-vaulted rooms, some open and some with doors in which live religious beggars and ascetics. In the centre of the courtyard is the main temple dedicated to Omkareshvar Mahadev with a small shrine in front, not far from the gateway, containing the bull Nandi a seated life-size stone figure. The temple has a main chamber in the centre vaulted on the top in which is set the *ling* about three feet under-ground. Over the vaulted top of the shrine rises a plain conical pinnacle. Round the main chamber is a space covered by eight small brick vaults. Two flights of steps or ghats, one from, the main temple and the other from outside the main gate, run north to the river bed. The sandbank between these two flights or *ghats* is used as a burning ground for Brahmans. The temple is held in great veneration. The levels of the different temple doors are so arranged that the water of the river when in flood, just enters and fills the courtyard and the shrine. Unless the *ling* is flooded once at least in the year, the rains are regarded as scanty. In seasons of drought, Brahmans are paid to carry water on their shoulders and fill the shrine, when it is believed Shiv will send torrents of rain. The hom or sacrificial offerings of cooked rice and clarified butter with pieces of sacred wood are offered once every year at the temple on a permanent stone altar specially built for the purpose. Attached to the temple on the west is a small garden, formed by reclaiming ground from the river bank by a heavy retaining wall of stone masonry. The temple expenses are met from the income of the garden and a monthly grant of £2 10s. (Rs. 25) from the Parvati temple revenues. The cost of the yearly sacrificial offerings or *horn* is met by a yearly Government grant of £100 (Rs. 1000). The size and solid massiveness of this temple, together with its nearness to the burning ground, make the name Omkareshvar greatly feared by the people of Poona.

Pandhri or Juna Kot (24).

PANDHRI KOT or the White Fort, also called Juna Kot or the Old Fort, is said to have been built by Barya an Arab commandant after Poona was made a Musalman military station in the fourteenth century. The fort stretches from the Dhakta or younger to the Thorla or elder Shaikh Salla [See below Shaikh Salla (31).] along the river bank on the north, and from the Thorla Shaikh Salla to the Mandai market on the west. From Mandai it ran south parallel to the river bank, and a line run from the causeway near the Kumbhar gate eastward to join the southern boundary. A *pipal* tree named Baloba which is still fresh is said to date from early Musalman times. On the break up of the Bahmani kingdom near the close of the fifteenth century Poona fell with most other parts of Poona district to Ahmadnagar. It continued under Ahmadnagar till in 1630 Murar Jagdevrav, a Bijapur minister, is said to have passed a plough drawn by asses over the fort wall and to

have fixed an iron rod in the ground meaning that the town was never again to be peopled. About 1636, after it had remained desolate for six years, Mahmud Adil Shah (1626-1656) of Bijapur raised Shahaji Bhonsla to the command of 12,000 troops and granted him Poona and other villages. In the same year one Malthankar whom Shahaji had appointed his deputy at Poona, passed a golden plough over the fort wall, removed the iron bar, and, to keep off evil, performed a *shanti* or soothing ceremony. These ceremonies are believed to mark the beginning of good luck to Poona.

Parasnath Temple (25).

In Vetal ward is a group of four temples to the twenty-fourth Jain saint PARASNATH, close to each other, two of them in one enclosure. The oldest of Parasnath's temples lay in Kalevavur to the south-west and outside of the city, as the Peshwas would not allow a Jain temple to be built within the city. About 1750 the Jati or high priest of the Jains and Shankaracharya the Brahmanical pontiff happened to meet in Poona. After a long discussion it was agreed, it is said by bribing the Shankaracharya, that a Jain temple might be built in a quarter where Brahmans did not live. The Peshwas granted the site of the present main temple, where two buildings one for Chidambari or Whiteclothed and one for Digambari or Skyclad Jains were built both by public subscription. Of the two sects the Chidambaris or white-robed are the stronger. Both worship naked images but the Chidambaris dress their images with clothes, flowers, and ornaments, while the Digambaris leave the body of their image naked and lay all offerings at the toes of the image's feet. The first two temples were enclosed by a high strong wall and strong gateways which were kept always shut that the noise of the temples might not reach Brahman ears. No spires were allowed as their sight would have polluted orthodox Hindus. The temple of the Humbad or Digambari sect is now in the same state in which it was originally built; but the temple of the Chidambari sect, which is dedicated to Godi Parasnath, proved too small, and the form of the temple, which was more like a private house than a public place of worship, was changed. Encouraged by the religious freedom they had enjoyed since the Peshwa's overthrow in 1818, between 1830 and 1834 the Jains raised subscriptions and built a temple to Rishabhdev the first of the Tirthankars at a cost of £300 (Its. 3000). Since then they have kept adding out-houses to the temple from year to year. The buildings as they now stand contain a chief entrance facing north and two side entrances facing west, one of them leading to the Digambari temple. Over the main entrance is a drum-house or *nagarkhana* and open porticoes or *devdis* are built inside the two other entrances. The main door leads to a long line of upper-storeyed rooms on the left, each of which is a separate temple. The original Chidambari temple, which has now fallen to be a secondary temple is in the middle of these rooms. On the right is the wall of the Digambari temple. Fifty yards more of an open paved passage leads to the enclosure of the main temple which is entered by a door in the north-east corner leading to an open paved courtyard in the middle of which is the main temple. The image chamber or shrine is a solid cut-stone and vaulted room about fourteen feet square and contains five white crosslegged and handfolded marble images set in a row against the back wall, the chief image being Rishabhdev the first Tirthankar. Outside the image chamber, but joined with it, is an octagonal portico, also built of solid stone and vaulted, the inside of the vault lined with small mirrors. The floor is of white marble with a thick black marble border.

The octagon has four side doors one leading to it from the *sabhamandap*, a second coated with brass leading to the shrine, and, two side doors which open on the courtyard. Niches are made in the remaining four sides of the octagon, the two nearest the shrine having small images and the other two having shelves. Outside of this octagonal portico is the wooden hall or *sabhamandap* (40' X 20') with a carved wood ceiling and built on a high atone plinth. At the far end of the hall in a small railed space are two marble elephants. Over the shrine doors and the octagonal portico are rooms with more images reached by narrow stone steps built round the sides of the octagon. Above the rooms side by side are the three symbolical spires of a Jain temple. Behind the temple courtyard is another yard with arrangements for bathing including warm water, for no worshipper may touch the idol until he has washed and dressed in wet clothes. The Jains have a curious mode of raising money for the maintenance of their temples. On holidays and great days when the community meets for worship they put to auction the right of applying saffron or *keshar* to the images and the highest bidder buys the right of first applying it. In this way large sums are raised.

The second temple of Adishvar to the west of the first was begun in 1851 and finished in 1854 at a cost of £1400 (Es. 14,000). The consecration ceremony on the 8th of May 1854 was attended by about 10,000 Shravaks. It is a two-storeyed brick and lime building carved in wood on the exposed parts and surmounted by a treble spire. Each storey has four rooms one behind the other. The ground floor is set apart for daily services at which a priest or guru reads and explains the Jain scriptures. On the first floor is the image of Adishvar, and on the second floor are smaller images. The back rooms of all the floors are used as dwellings by the guru who must be a bachelor or Brahmachari. The temple has been and is being added to from year to year. The third temple is like the second but much smaller. All four temples are gaudily painted and decorated with coloured chandeliers of various shapes and quaint glasses, globes, and other ornaments. Each is managed by a firm of merchants of long standing and established reputation. The monthly cost of all the temples amounts to about £25 (Rs. 250). The jewels and the gold and silver coatings of the chief images are worth about.£300 (Rs. 3000) and the cash balances in hand amount to about £500 (Rs. 5000). The Jain holy months are Chaitra or March-April, Shravan or July-August, Kartik or October-November, and Phalgun or February-March when fairs are held. A car procession takes place on the full-moon of Kartik or October-November.

Phadke's Vada (26).

PHADKE'S MANSION, in Aditvar ward, was built between 1794 and 1799 by Haripant Phadke the commander-in-chief under Madhavrav the seventh Peshwa (1774-1795). The mansion is now more like a small village than a single house as the present owner has turned it into small rented tenements together yielding about £150 (Rs. 1500) a year. The first floor front of the mansion has for more than twenty years held the Free Church Mission Institution. The mansion is two-storeyed with many halls and seven quadrangles or *chauks* two of them large. It is built of massive stone and timber and is said to have cost about £170,000 (Rs. 17,00,000). Water from the Katraj aqueduct is laid on in the back quadrangle.

Purandhare's Vada (27).

PURANDHAKE, a school friend of Balaji Vishvanath the first Peshwa (1714-1720), was made his minister, and was granted a site in the fort for a house. In 1740 his heir Mahadaji Abaji Purandhare built a mansion in the fort at a cost of £5000 (Rs. 50,000) with two large and two small quadrangles. The descendants of the Purandhare family still live in the mansion which is now the only important house in the old fort. The line of the fort walls may still be traced.

Rameshvar's Temple (28).

RAMESHVAR'S TEMPLE in Shukravar ward was built by Jivaji Pant Anna Khasgivale the founder of the ward at a cost of £3500 (Rs. 35,000). The temple has the usual shrine with portico and spire and a wooden hall or *sabhamandap*. The hall was enlarged and rebuilt about 1870 by a rich public works contractor. In 1878 a railway contractor rebuilt the doorway and over it raised a music hall or *nagarkhana*. The contractors paved the whole enclosure including a large well whose top they covered with iron rails and beams of wood. This temple is held in great veneration. Its great days are *Shivratra* in January-February and the bright half *Kartik* or October-November.

Rastia's Vada (29).

RASTIA'S MANSION in Rastia ward is one of the largest remaining mansions in the east of the city. It is surrounded by a high thick wall. The chief entrance is by a plain but handsome square gateway with massive woodwork over which rises a two-storeyed building. Round the inside of the enclosure runs a row of cloisters originally the stables of Rastia's cavalry retinue, now either open or built in and let as rooms to poor families. In the centre of the enclosure is the mansion which consisted of two three-storeyed buildings the mansion and a store-house or *Kothi*, since burnt, with plain thick walls, built round two rectangular court-yards. The mansion with two quadrangles remains and attached to it is a large garden and a Mahadev temple to which a temple of Ram was added in 1882 by the widow of the last Rastia. The temples are stone-built shrines and open porticos surmounted by spires. The Rastias were the hereditary heads of the Peshwa's cavalry and lived at Wall in Satara. The mansion was built between 1779 and 1784 at a cost of £90,000 (Rs. 9 lakhs) by Anandrav Bhikaji Rastia in the reign of Madhavrav the seventh Peshwa (1774-1795). An aqueduct brought from a spring in the hills of Vanavdi village four miles south-east of Poona was built by Anandrav immediately after wards at a cost of £20,000 (Rs. 2 lakhs) to supply water to the mansion and public cisterns outside.

Sassoon Asylum (30).

The SASSOON ASYLUM, or Poor House, in Narayan ward on the, river Mutha above the Lakdi bridge, is. a home for the aged, infirm, and diseased poor of all classes. It has at present (1883) about sixty five inmates. The asylum was established in 1865 from funds raised by a public subscription amounting to £10,717 (Rs. 1,07,170), the greater part of

which was given by the late Mr. David Sassoon whose name the asylum bears. £3457 (Rs. 34,570) were spent on buildings and of £7260 (Rs. 72,600) which were deposited in the Bombay Bank only £1301 (Rs. 13,010) were recovered on the failure of the bank in 1869-70. Further subscriptions were collected and the fund was raised to over £5000 (Rs. 50,000) which is now invested in Government securities. The asylum is managed by a committee of life members of whom the District Collector is the President. The working body is a managing committee nominated by the general committee with two secretaries. The Poona Municipality contributes £10 (Rs. 100) a month to the asylum. The spacious site of the building was given free by Government. The building stands on a high plinth raised above the flood line and has eleven detached wards, each 33' x 18', with a cooking and dining room (123' x 27'), an office room (43' x 34'), and latrines and out-houses. A medical attendant looks after the health of the inmates, the diseased being kept in different wards to avoid contagion. Of the (1883) sixty-five inmates, seventeen men and eleven women are unable to earn a living from old age; six men and five women are blind; and twenty men and six women are lepers.

Shaikh Sallas Tombs (31).

The two SHAIKH SALLAS, THORLA or the elder and DHAKTA or the younger, are two Musalman shrines or *dargahs* on the river bank in Kasba ward. They stand on the site of two Hindu temples of Narayaneshvar and Puneshvar. According to the local tradition, in 1290, Syed Hisa Mohidin Khalal and four other Musalman ascetics came from Delhi, desecrated the two temples, threw away the *lings*, and turned the temples into shrines or *dargahs*. The temple of Puneshvar [The Puneshavar *ling* is said to have been taken to the foot of Purandhar fort where a temple still remains which was built for it.] became known as Shaikh Salla-ud-din's or the younger Shaikh Salla's shrine and the Narayaneshvar temple as Shaikh Hisa Mohidin's or the elder Shaikh Salla's shrine. The two Poona villages of Yerandvane and Kalas, whose revenues had been enjoyed by the temples, were continued to the shrines. According to another story the temple priests asked the Bijapur government to restore them the villages. The Bijapur authorities refused unless the Brahmans undertook the saints' worship. On this one of the Brahman priests embraced Islam, was appointed *mujavar* or ministrant of the shrines, and passed down the office to his family by whom it is still held.

Dhakta Shaikh Salla's Tomb.

A pointed arched stone gateway reached by a flight of steps leads to a large enclosure, whose centre is shaded by a vigorous old tamarind tree under whose branches are several small tombs. To the left and right near the outer gateway are rest-houses with strong plain wooden pillars and opposite the door is another higher and more modern rest-house all built of wood. Some chambers to the right have a row of pillars with outstanding deep-cut brackets stretching from their capitals to the roof. In this row of buildings a door, whose posts are thickly covered with old horse shoes, opens into an inner courtyard with several tombs. The tombs to the right are of little size or interest. But opposite the doorway a larger monument, of no great elegance, with some open trellis windows, is said to be the tomb of a grandson of Aurangzeb who is said to have been buried here for a year and to

have been then carried to Aurangabad. Further to the left the large dome with the gilt crescent is the tomb of Shaikh Salla, and still further to the left is a mosque on the site of the Puneshvar temple, whose images are said to he buried under the floor of the mosque. The mosque bears marks of its Hindu origin in three doorway pillars, two of which are old Hindu work, square at the bottom, then rounded, then octagonal, and again square. The door is also Hindu with a Ganpati niche in the lintel. On the left in an open place under a wooden roof are some tombs. Some broken pillars plainer than those at the doorway lie scattered among the graves on the left. Behind the mosque a flight of steps led from Puneshvar's temple to the river bed. In the front courtyard to the left is a tiled building where a bier or *tabut* is kept and where congregations are held for prayer.

Thorla Shaikh Salla'e Tomb.

The THORLA or ELDER SHAIKH SALLA'S SHRINE on the site of the Narayaneshvar temple, and containing the tomb of Shaikh Hiss Mohidin, lies on the Mutha below the Mandai market. The tomb, which has a plain doorway, is approached by a flight of steps. The space inside is very uneven and is now a regular burial ground with numerous graves round the central tomb which is a circular domed room. To the east and south-west are remains of old rest-houses. Outside the main entrance and facing the river side is along building of plain wood work. On the other side are the residences of the tomb ministrant or *mujavar*, and in the middle an open courtyard. A flight of steps leads down the inner enclosure through an archway under the enclosure wall to the river. The ruins of the original Narayaneshvar temple are still scattered about to the south-west of Hisa Mohidin's tomb. They consist chiefly of stone columns and lintels, some in their places and others strewn over the ground. The columns and lintels and the form of the old temple are in the old Hindu style. The villages granted to the tombs are now encumbered and not in the hands of the ministrant family who are badly off.

Shanvar Palace (32).

The SHANVAR PALACE in Shanvar ward, probably at that time (1730 -1818) the finest modern palace in the Deccan, was the chief residence of the later Peshwas. It was so destroyed by fire in 1827 that all that remains is the fortified enclosure wall about 200 yards long by 150 yards broad and twenty feet high. The lower five feet of the wall are built of solid stone and the upper fifteen feet of brick. The wall has eight bastions and five gateways in the Musalman-style the gates with high pointed arches. Of the eight bastions, all of which are of stone below and brick above, four are at the corners and four in the middle of each face the north one having the main gateway. The wall has five gateways. The main entrance in the centre of the north wall is called the Delhi gate as it faces Delhi. The huge wooden door remains thick-set with iron spikes to ward off elephants. The gateway is flanked by large twelve-sided cut-stone bastions with turrets. Above the main entrance is a large hall now used as a record room. Inside the enclosure are lines for the city reserve police and a garden and parade ground On the north to the east of the main entrance is a smaller gate the name of which is not known. Two small gates in the eastern wall are called the Ganesh and Jambhul gates, the Ganesh called after an image of Ganpati on one side of it and the Jambhul after a jambhul or Eugenia

jambolana tree which grew near it. The fifth gate is in the south wall at the western end. It is called the Mastani gate after Mastani the beautiful Muhammadan mistress of Bajirav the second Peshwa (1721-1740) who used to pass in and out of the palace by this gate. Mastani was brought by Chimnaji Apa from Upper India and presented to the Peshwa. She was a noted beauty and the Peshwa was extremely fond of her. Large landed property and buildings were granted to her and a garden in the city still goes by her name.

The site of the Shanvar palace was chosen by the second Peshwa Bajirav Ballal (1721 -1740), who, according to the well worn story, when riding, saw a hare turn on a dog and thought that a house built on that site would never be taken. The site, which is about 4½ acres, was cleared of Koli and other huts and the foundation stone was laid by Peshwa Bajirav on the new moon of. the Musalman month of Rajab in 1729. Part of the foundation-laying ceremony is said to have been the burial of a live Mang. Shahu (1708-1749) of Satara told the Peshwa not to put the main entrance to the north as it would mean a war with Delhi, the Moghal capital, of whose ruler Shahu always considered himself a vassal. In deference to Shahu's wishes the building of the gate was stopped and it was not completed till after Shahu's death (1749) by the third Peshwa Balaji Bajirav (1740-1761). The palace was a six-storeyed building with four large and several smaller courts or chauks. The courts were called either from the objects for which they were set apart or the persons who occupied them. One was called Phadacha Chauk or the Granary and Stores Court, a second Tak Chauk or the Dairy Court, a third Mudpak Chauk or the Kitchen Court, a fourth Pakvanna Chauk or the Sweetmeat Court, and two others Savitribai's and Yamunabai's Chauks after two ladies of the Peshwa's family. The halls or divankhanas of the palace had names taken either from their decorations or from their uses. One was called the Gokak Divankhana, because it was embellished with toys and decorations from Gokak in Belgaum; another the Nach Divankhana where dancing parties were given; a third the Kacheri Divankhana or audience hall, where statesmen and strangers were received; a fourth the Hastidanti Divankhana or ivory hall because of an ivory ceiling and other decorations; the fifth the Ganesh Divankhana where Ganpati was yearly worshipped in *Bhadrapad* or August-September: a sixth the Arse Mahal because its walls and ceiling were covered with mirrors; and a seventh, Narayanrav's Mahal because it was specially built for the fifth Peshwa Narayanrav (1772 -1773). These and other halls were in the form of a standish or kalamdan with a central main hall with square ceiling, and side compartments with sloping ceilings like the aisles of a church. The pillars supporting the main halls were of wood cut in the cypress or *suru* pattern and were joined together on the top by thick cusped arches. The ceilings were covered with beautiful wooden tracery in different patterns. The wood work was painted with figures of trees and men or scenes from the Purans in enamel and gold. The stone work inside the courts was throughout finely chiselled and polished. Most of the important courts had central fountains. [The seventh Peshwa Madhavrav II.(1774-1795) threw himself from the uppermost floor on one of the-fountains, broke both his legs, and died after two days' illness.] The height of the palace is not known. It is said that the spire of Alandi temple twelve miles north of Poona was seen from the uppermost terrace. All round the palace thick iron chains were hung on the walls to ward off lightning and other evil spirits. A retinue of Brahman servants was maintained at the palace at a monthly cost of £150 (Rs'. 1500). From a cistern in the palace water was raised to the seventh storey and carried to

the Mudpak court, Tak court, and other parts of the palace. The fountain in Phad court was famous for its size and beauty. The story is told that, while the palace was building, no one thought of the water-supply except a skilful mason who stealthily built a duct under the wall and made a reservoir near the Ganesh gate. When the palace was finished and the Peshwa was arranging to bring water from the Katraj aqueduct into the palace he saw no way except by pulling down a part of the enclosure wall with the building on it. The mason showed his duct and was rewarded for his foresight by the grant of a village near Ahmadnagar where his descendants still live. In 1755 stone towers were built over the gateways. In 1788 the Phad court was rebuilt under the superintendence of Nana Fadnavis. In 1811 an Asmani Mahal or Sky Hall built by Bajirav the last Peshwa (1796-1817) was burnt down. In 1827 on Thursday the bright sixth of *Phalgun* or March-April the palace- caught fire, and continued burning about a fortnight. In spite of all efforts, almost the whole of the palace was destroyed. Among the parts saved was the Mirror Hall which has since been removed. The palace site is now used for the reserve force of the Poona city police.

Shukravar Vada (33).

The SHUKRAVAR PALACE in Shukravar ward was built by Bajirav the last Peshwa in 1803-4. It was partly burnt in 1820 and the ruins were sold by Government. No trace but the bare walls remains. This was a small building with two courts and two upper storeys. It was Bajirav's private residence.

Someshvar's Temple (34).

SOMESHVAR'S TEMPLE in the Aditvar ward was built by Narayanrav Natu about 1830. It has become a great resort for wan dering Gosavis. The temple is now (August 1884) being rebuilt by public subscription among the Marwari shopkeepers in the Kapadganj market who have already given about £3000 (Es. 30,000) The body of the temple is being built of polished trap with marble columns and terraced windows. The original image chamber is preserved and is being lined with masonry. The hall will be built of carved wood. A public cistern has been built in the yard and a small garden has been made at the back. Along the sides are rest-houses for Gosavis. The doorway with a small drum-house or *nagarkhana* over it has been recently rebuilt. The *ling* of this temple is a natural knob of rock like the Omkareshvar *ling* and is held in high veneration. The great day of the temple is *Mahashivratra* in February-March. The temple expenses are met by subscriptions among the traders of Kapadganj.

Tambdi Jogeshvari's Temple (35).

JOGESHVARI was one of the oldest guardians of the city and had a temple about a mile to the north of the town when it consisted of about a dozen huts. The goddess, who is now painted red and called Tambdi or Red Jogeshvari, is formally asked to all marriage and other important family ceremonies. The temple is very plain and built of solid stone with a shrine and a small hall in front. On the sides are platforms with images of Vithoba,

Mahadev, and Ganpati. The holy days of the temple are the *Navratra* in September - October.

Tulsibag Temple (36).

TULSIBAG TEMPLE in Budhvar ward, was built in 1761 by order of the third Peshwa Balaji Bajirav (1740 - 1761). The temple stands on the site of a garden of basil or *tulsi*. Close to the garden a stream now dry passed by the Red Jogeshvari's temple. A trace of the stream remains in a woman's tomb behind the Tulsi Garden which must once have been on the bank of the stream. The building of the temple was superintended by Naro Appaji who was also made the temple manager. The Tulsibag is about one acre in area and is entered by a small door. It contains three temples, one of Ram in the middle, of Ganpati on the right of Ram, and of Shiv on the left. Ram's temple consists of a cutstone and vaulted shrine with a spire and an arcaded portico with a marble floor. Ganpati's and Mahadev's temples are also of cutstone but smaller and without the portico. In front of the temple a yard laid out in flower beds is crossed by paved footpaths which lead to the different temples. Behind the temples are two detached halls beyond one of which is a basil pillar. Below the pillar is a four-armed stone image of Vishnu lying on the serpent Shesh. In front of Ram's temple is a third large hall about twenty feet high with a woodcarved ceiling and a fountain. Ram's temple has three white marble images of Ram Sita and Lakshman. In front of Ram in a small stone shrine is a black-stone standing image of Maruti with folded hands. Over the north and south gateways are two drum-houses or nagarkhanas where drums are beaten daily at morning evening and midnight and in addition at noon and afternoon on Saturdays, the day on which Poona passed to the Peshwas. Additions and alterations, at a cost of about £3000 (Rs. 30,000), have lately been made to the temple by Mr. Nandram Naik. A very elegant new conical cement spire 140 feet high and ornamented with figures foliage and niches has been built; and the third hall or sabhamandap (60' X 40' x 20') has been rebuilt of massive wood. Tulsibag is the most frequented temple in Poona. It enjoys a grant for the maintenance of the drum-house from the Parvati temple revenues and has shops and houses whose rents go towards its expenses.

Vetal Temple (37).

The temple of VETAL or the Ghost King in Vetal ward, is an ordinary looking and popular temple with a shrine, a chamber, and an outer hall. Round the outside of the temple runs an open air passage about six feet wide, and round the outside of the passage is a row of rough undressed stones about six inches high covered with whitewash and tipped with redlead. The north and west walls of the" temple are also marked with great patches of redlead and whitewash. Near the entrance door is a small altar where a lamp burns and where are impressions of Vetal's feet and a small Nandi or bull. Low caste people do not go further; they bow beside the feet and look at Vetal. From the roof of the shrine or chamber at the west end of the hall hangs a bell, which, according to the temple ministrant, one of the Peshwas presented to Vetal in fulfilment of a vow that he would offer Vetal a bell if the casting of a certain cannon was successful. The god is a red block about three feet high and three feet round. The top is roughly made into the shape of a

man's face with large eyes and a blacks moustache. It is thickly encrusted with redlead. On the top of the head is a small wreath of chrysanthemums. From the roof hangs a garland of *bel* or E*gle* marmelos and custard apple leaves and marigold flowers, and across the door is a string of dry mango leaves. The god is washed every day, but no light is burnt near him. Friday is his big day. The god is a pillar of cement built over a round undressed stone, which, about ninety years ago, a Maratha brought from the village of Bapgaon in the Purandhar sub-division. His great-grandson is the present ministrant or *pujari*. All classes of Hindus, Brahmans as well as other people, worship this Vetal. Vetal is worshipped in the same way as Bahiroba and other Maratha gods. Goats are sacrificed to him in fulfilment of vows; cocks are not offered. Vetal's chief worshippers are athletes and sorcerers.

Vishnu Mandir(33).

VISHNU MANDIR or Vishnu's temple in Gosavipura in Somvar ward is one of three charitable works built in 1846 at a cost of £13,000 (Rs. 1,30,000) by a wealthy Gosavi named Bava Narpatgir Guru Kisangir who died in 1859. To remedy the deficient watersupply of Gosavipura Bava Narpatgir laid a branch from the Katraj aqueduct and built public cisterns, this temple, and a rest-house. [In reward for his public spirit Government presented the Bava with a gold bracelet.] The work was begun in 1846 and finished in 1850. The temple consists of a small solid stone room about twenty feet square with a vault surmounted by a conical tower. The objects of worship in the room are images of Vishnu and Lakshmi. The tower is richly ornamented with foliage, niches, and mythological figures in stucco. In front of the room is an arched stone portico. Touching the portico on a lowers level is a large wooden hall or *sabhamandap* open on the north. The hall has a central nave and aisles. To the north of the temple is a paved quadrangle surrounded by open wooden pillared halls. To the north of the first quadrangle is a second with rooms and halls on the sides. The first quadrangle has a neat little fountain and outside the temple premises are two large public cistens Bava Narpatgir has endowed the temple cisterns and rest-house with lands yielding £50 (Rs. 500) a year.

Vishnu's Temple(39).

VISHNU'S TEMPLE in Shukravar ward was built by Jivajipant Anna Khasgivale. Behind the temple is a water cistern or *haud* from which Brahmans alone are allowed to draw water. Beyond the cistern was a garden belonging to Khasgivale with a dwelling surrounded by fountains. The garden, dwelling, and fountains have been removed and the site taken by the Poona municipality for the central market.[See above pp. 337-338.] The temple is in two parts, a shrine and a portico, both built of solid stone and vaulted with a spire. In front is an open wooden hall or *sabhamandap* with a tiled roof where Purans are read every evening to large numbers of people.

Vishrambag Palace(40).

VISHRAMBAG PALACE in Sadashiv ward, now used for the Government High School, is a large one-storeyed mansion, 260 feet long and 815 feet broad. The palace has three

quadrangles or *chauks* each with open halls on all sides on the ground-floor and enclosed rooms with numerous windows on the upper floor. The chief supports on the groundfloor are all of wood, cut square and placed on stone pedestals. The beams and girders are also of wood, cut and dressed square. The columns of the upper floor are also of wood carved in the cypress or *suru* form. The columns have a square base and rounded top. The shafts are round but bulge out a little at starting and taper at the head. The entablature is nearly the same as the base inverted though smaller. Above the entablature the column runs square and receives the square post plate and over it the beams. The space between the post plate and the entablature is filled by a false wooden arch. The arch is cusped and horse-shoe shaped, the centre raised in a point by turning up the ends of the two uppermost cusps of the arch. The shafts are carved with the stalk and leaves of creepers and the base and entablature are enriched with foliage. The arches start from the stem which carries the flower and fruit of the creeper. The palace roof was originally a terrace, but it has been lately made into a tiled roof. The quadrangles or *chauks* are well paved squares with ample room for lectures and other meetings. The hindmost quadrangle contains three small cisterns placed in a line in the centre and fed by the water of the Nana Fadnavis aqueduct. Outside the palace is a large public cistern called Pushkarni. The palace was built as a residence by Bajirav the last Peshwa between 1803 and 1809 at a cost of £20,054 (Rs. 2,00,540). The aqueduct and cisterns cost a further sum of £850 (Rs. 8500). The palace was furnished at a cost of £1400 (Rs. 14,000), and an establishment at a monthly cost of £40 (Rs. 400) was kept to guard it and attend the Peshwa when he lived there.

On the recommendation of Mr. Chaplin, Commissioner of the Deccan (1818-1821), Government set apart £2000 (Rs. 20,000) out of the Dakshina Fund, [Details of the Dakshina Fund are given above under Instruction pp.48, 62. 64.] to maintain a college for the study of the Vedas and Shastras. The college or Pathshala was started in this palace in 1821. About 1842 the study of the Vedas was stopped and classes for teaching English were substituted, with the late Major Candy, the author of the Marathi Dictionary, as the head of the college staff. The study of the Shastras was stopped in 1856 and the first Deccan College was formed with a preparatory school attached. In course of time (1868) the very handsome Deccan College buildings now in use were completed. The preparatory school which then became the High School has since remained in the Vishrambag palace. In May 1879 the front quadrangle of the palace was burnt down by incendiaries. Public subscriptions, aided by municipal contributions, were raised and the buildings restored somewhat to their original appearance. It is intended to make the restoration complete.

Miscellaneous.

Besides the above the following buildings may be noted. In Aditvar ward, Ghorpade's mansion with a large public cistern and a *jalmandir* or water-house that is a house built on pillars in water. In Budhvar ward Mankeshvar's palace now owned by the Kibe banker of Indore, and Thatte's temple of Ram; in Ganj ward Raje Bagsher's mosque; in Kasba ward Nana Fadnavis mansion where the Peshwas' records are kept; in Narayan ward the Gaikvad's mansion the Lakdi bridge and Vithoba's temple; in Shanvar ward Appa

Balvant Mehandale's mansion, Chandrachud's mansion, Gadre's mansion owned by the Dowager Rani of Baroda and now occupied by the New English School, Harihareshvar's temple, Holkar's mansion, Jamkhandikar's mansion, Sanglikar's mansion, and Shirke's mansion. In Shukravar ward Bara Imams' or the Twelve Saints' mosque, Bhau Mansaram's mansion built by a rich contractor Bhau Mansaram in 1869, and Nandram Naik's mansion built in 1859 both favourite resorts of Maratha chiefs visiting Poona on business or pleasure, and the Pant Sachiv's mansion; and in Vetal ward Chaudhari's mansion now in possession of Rav Saheb Bhajekar, and the S. P. G. Mission house and church.

Cantonment.

The Cantonment, the eastern section of Poona, has an area of about 425 square miles, about 30,225 people, and during the five years ending 1883, an average yearly cantonment revenue of about £6664 (Rs. 66,642).[The details are: Rs. 21,635 in 1879-80, Rs. 24,840 in 1880-81, Rs. 85,507 in 1881-82 Rs. 1,08,394 in 1882-83, and Rs. 92,837 in 1883-84.] It is a rectangular plot of land about 2.72 miles from north to south and varying from 1.36 to 1.62 miles from east to west. It is bounded on the north by the Peninsula railway, on the east by Bahiroba's stream, on the south by a line drawn from the Vanavdi Hay stacks past the back of the Military Prison (85) to the cemetery on the Satara road (59), on the south-west and west by the Bhavani and Nana wards of the city, and on the north-west by the line of the Council Hall road which separates it from the suburban municipality.

Divisions.

Almost along its whole length to the Right Flank Lines in the extreme south, the central belt of the Military cantonment, with an area of 130 acres, is kept open for parade and other military purposes. Beyond this central open belt to the north-east are the Ghorpadi Lines and Barracks, to the south-east the Vanavdi Lines, to the south the Right Flank Lines so called because they are on the right flank of the cantonment, to the south-west the Neutral Lines and the Petty Staff Lines, to the west the Native Infantry Lines and behind them the Sadar Bazar, to the north-west the Ordnance Lines and behind them the Staff Lines. Beyond the natural limits of the cantonment, but under the control of the Cantonment Magistrate, in the extreme north-east on the right bank of Bahiroba's stream, between the Peninsula railway and the river, are the Native Cavairy Lines.

Aspect.

The land in the cantonment forms two parts, the central belt most of it of poor soil and rock, bare of houses, and with few trees except those that line the roads which cross and encircle it; and the groups and lines of residences chiefly of European civil and military officers in the Ghorpadi lines in the north-east, in the Vanavdi Lines in the south-east, in the Right Flank Lines in the south, and in the Neutral, Native Infantry, and Staff Lines in the west and north-west. All of these quarters or lines are well provided with excellent roads some of which have road-side trees and riding paths. Most of the houses are in

enclosures of half an acre to two acres fenced with brick walls or low cactus hedges. Many of the enclosures are bare of trees. Others, especially during the rains, are shady gardens well stocked with shrubs, roses, geraniums, and flowering plants and creepers. With a few exceptions the houses are one-storeyed buildings, on plinths two to five feet high with stone and cement walls and tiled roofs. A few are owned and held by wealthy Natives but most are owned by Natives of Poona and let to Europeans, chiefly Civil and Military officers at monthly rents of £5 to £15 (Rs, 50- 150) or £80 to £120 (Rs. 800 - 1200) for the rainy season. Each house has its line of stables and servants' quarters generally of brick. Besides these lines the cantonment limits include two lines of small houses with small front gardens and paying rents of £2 10s. to £7 10s. (Bs. 25 - 75) a month. These are the Ordnance Lines to the north-east of the Native Infantry Lines and the Petty Staff Lines to the south-west of the Neutral Lines. The residents of these lines are chiefly European and Eurasian pensioners and Government servants. The nine lines within cantonment limits have 4451 people of whom 981 are Europeans and the rest (3470), chiefly their servants, Goanese, Musalmans, and Hindus.

Sadar Bazar.

To the left of the Native Infantry lines is the Sadar Bazar or chief market a town (1883) of 2491 houses, 705 shops, and 17,813 people, which has sprung up since the beginning of British rule. The main thoroughfare is a fine broad street with open paved gutters, broad footpaths lighted with kerosine lamps, and shops shaded by fine trees.

Houses.

Some of the houses are small and poor with low front walls. Most are two-storeyed many of them built on a plinth, with a receding ground floor and pillars at the edge of the plinth supporting an overhanging upper storey with projecting beams generally without carving. In other houses the ground floor comes to the edge of the plinth and in the upper storey is an overhanging balcony. Besides these single and two-storeyed houses are handsomer buildings three or four-storeys high, with fronts of rich strong wood work with fine rounded pillars and deep overhanging balconies and verandas with iron railings.

The owners of the Sadar Bazar houses are Hindu traders chiefly Gujarat and Marwar Vanis, Shimpis, Telis, and Kamathis, and of the poorer dwellings domestic servants to Europeans. Next in number to the Hindu houseowners come Muhammadans, Mehmans, Bohoras, mutton and beef butchers, dealers in poultry, Government pensioners, and domestic servants to Europeans. Parsis, who come next in number, own the best dwellings and are the chief traders. The Portuguese who are chiefly Government clerks own some well built though small dwellings. They are principally medical practitioners druggists and shopkeepers. Goanese and Native Christians chiefly bakers also own houses and live in them. Monthly house rents in the Sadar Bazar vary from 2s. (Re. 1) for a hut to £1 10s. to £2 (Rs. 15 - 20) for an ordinary dwelling. Shop rents vary for small shops from 10s. to £1 10s. (Rs. 5-15) a month and for large shops rise to as much as £5 (Rs. 50). Single lodgings or rooms are usually let at about 2s. (Re. 1) month. During the past few years rents hare risen and are now (1885) high.

In 1883 the Sadar Bazar had 705 shops of which 114 were grocers, fifty-five Bohora cloth sellers, forty-nine mutton butchers, forty-six retail country liquor sellers, forty-five shroffs or money lenders, thirty-eight beef butchers, thirty-five vegetable sellers, thirtyfive betelnut sellers, thirty-five tailors, thirty cloth sellers, twenty-seven goldsmiths, twenty-four fruit sellers, twenty-two wholesale Europe liquor sellers, eighteen carpenters, fifteen retail bakers, thirteen palm-liquor sellers, thirteen glass bangle-sellers, twelve wholesale bakers, twelve fish sellers, nine sodawater and lemonade sellers, five private dispensaries, five bookbinders, four perfume sellers, four cigar sellers, four ironsmiths, four watchmakers, three salt-meat sellers, three booksellers, two tent-makers, two glaziers, two workers in tin, two photographers, and one ice-seller. Besides the five private dispensaries which were owned by Portuguese and Hindus, a charitable dispensary for medical advice and treatment is maintained at the cost of the cantonment fund. As regards the caste or race of the different classes of shopkeepers the photographers and the ice-maker were Parsis, the tailors and tent-makers Maratha and Kamathi Shimpis, the boot and shoe makers chiefly Pardeshi and Telangi Mochis, the glaziers and carpenters Parsi Hindu and Musalman carpenters, the palm-liquor sellers Parsis Marathas and Kamathis, the grocers chiefly Gujarat and Marwar Vanis, the cigarsellers Goanese and Madras Hindus, the Atars or perfume sellers Muhammadans, the wholesale Europe liquor sellers chiefly Parsis, the bakers almost all Goanese, the goldsmiths Pardeshi Maratha Gujarati and Telangi goldsmiths, the sodawater and lemonade sellers mostly Hindus, the cloth-sellers chiefly Mehmans Gujarat Vanis and Shimpis, the beef and mutton butchers Muhammadans, the vegetable sellers Hindus and Muhammadans, and the fish sellers, some of whom import fish from Bombay in ice, Parsis and Hindus, in addition to these 705 ordinary shops are eleven large shops, one a branch of a joint stock company, six owned by Europeans, one by a Hindu, two by Parsis, and one by a Musalman. [The branch of the joint stock company is Treacher and Co. 's general merchants chemists and druggists; the six European-owned shops are Badham Pile and Company clothiers, Mrs. Hunt and Mrs. Taylor milliners, Mr. J. Farbstein hair cutter, Marcks and Company watchmakers, Phillips and Company chemists, and Watson and Company general merchants; the one Hindu-owned shop is Morgan and Balkrishna chemists druggists commission agents and auctioneers; the two Parsi-owned shops are Cooper and Company booksellers and stationers, and Orr and Hirjibbai saddlers boot and shoemakers commission agents and auctioneers; and the one Musalman-owned is Ludha Ibrahim and Company general merchants and auctioneers.]

During the south-west monsoon that is between June and October several European and native tailors, milliners, and dress makers come from Bombay to Poona. Of liquor shops in the Sadar Bazar twenty-two sell wholesale Europe spirits wine and beer, and forty-six shops retail country liquor and thirteen shops retail palm liquor or toddy. Country liquor is distilled by a contractor at a distillery, which is under Government supervision, about four miles east of the cantonment. Palm liquor is brought from the neighbourhood of Poona by a contractor who pays Government a certain sum for the monopoly of the sale within a certain area. The country spirits are chiefly distilled from *moha* or Bassia

latifolia flowers and sugar. The tavern keepers are Parsis, Hindus, and some Muhammadans. The business is brisk and lucrative.

Population.

Except [Contributed by Mr. S. Kyte, Police Inspector, Poona.] a few poor European pensioners the Sadar Bazar is peopled by Natives. They are of two classes outsiders and locals. The outsider classes are chiefly Parsis from Bombay, Bohoras from Gujarat, Mehmans from Cutch, and Vanis from Gujarat and Marwar. The chief local classes are Brahmans, Buruds, Chambhars, Kamathis, Malis, Marathas, Mochis, Shimpis, and Sonars. The outsiders are rich and prosperous, the locals are chiefly craftsmen who, though well-to-do, have not risen to wealth.

Outsiders.

The first Parsis who settled in the Sadar Bazar came from Sirur in East Poona in 1818 when the bulk of the British troops were moved from Sirur to Poona. They opened four Europe shops in thatched huts. The first to build a permanent shop was one Mr. Motabhai and the others followed his example. The richest of them was Bejanji Canteenvala the maternal grandfather of the present mail contractor Mr. Framji Ardeseer who built a large shop in the Sadar Bazar and at Kirkee. The Parsis now form a prosperous community. They live in Main street and deal chiefly in European liquor, oilman's stores, and groceries. Others are watchmakers, carpenters, bookbinders, coach-builders, housepainters, hotel-keepers, and clerks. A few are men of property who live on the rents of lands and houses. The traders order almost all their stores from England and the continent of Europe. Their chief patrons are Europeans and Eurasians. Bohoras, Shia Musalmans chiefly of Gujarat origin, came to the Sadar Bazar soon after it became a British camp. They are said to have begun by selling raw cotton. They now deal in piece goods, oilman's stores, crockery, hardware, and glass. They never sell liquor or lend money. The Mehmans, who are Sunni Musalmans of Cutch, settled in the Sadar Bazar in 1835. They had traded with Europeans in Cutch and, finding them profitable patrons, followed them to Bombay and from Bombay to Poona. They began as hawkers seling piece goods muslins and woollens. Later on they dealt in oilman's stores, and they now sell English millinery, harness and saddlery, plated ware, crockery and glass, piece goods, furniture, and horses and carriages. They do not sell liquor or lend money. Some live on incomes drawn from land and house property. They deal direct with England and the continent of Europe. Vanis or Banias were the first settlers in the Sadar Bazar and are now the largest body of traders. They are of three classes, Gujarat Marwar and Lingayat Vanis, all hardworking and moneymaking. The Lingayats have the best name for fair dealing; the Gujaratis and Marwaris are hated for their hard greedy ways. Most of all three classes deal in grain and pulse. Others trade in piece-goods both European and local, and a few mostly Gujaratis do nothing but lend money. Borrowing from these Vanis leads many Eurasian youths to ruin. Grain dealers buy wholesale from city traders and sell retail in the cantonment. Besides dealing in grain they generally sell tea, coffee, sugar, tobacoo, and kerosine oil which they bring from Bombay. The piece-goods dealers bring most of their goods from Bombay. They sell to Europeans and Eurasians, but their chief

customers are low class Hindus. Lingayat and Gujarat Vanis generally begin life by taking service with a dealer or shopkeeper of their own class. They save and lay by and start on their own account. A Marwari generally begins by carrying a sack of parched grain which he barters for old iron and broken bangles. He is a great child-tempter giving children parched grain and sometimes a copper or two for any little article they may pilfer from their parents' houses. After a time the Marwari opens a small shop and saves by the practice of the strictest thrift.

Local Classes.

Of the nine local classes Brahmans, most of whom are Deshasths, are a small body. Shrinking from risk spoils them as traders. Craft and thrift are their two leading money making traits. Most are clerks in Government and private service Buruds or bamboo workers, who live chiefly in Main street, make wicker and basket work and matting. The women earn as much as the men, who, though orderly and hardworking, are given to drink. Chambhars or Leather workers are a poor Marathi-speaking class. They make chaplas or sandals, and Deccan Brahman shoes called jodas. Their women help by lining the upper part of Brahman shoes with silk. They are poor, partly because they have a caste rule against making English boots and shoes. Kamathis are a class of Teluguspeaking craftsmen and labourers who live chiefly near Malcolm's pond. They are of many castes but the largest class are Kamathi flower gardeners or Phul Malis who do not grow flowers but work chiefly as masons and contractors. The men though active and clever are often careless and dissipated, sometimess kept by their wives who are excellent workers. A few Kamathis have risen to be clerks. Malis, who belong to the Phul Mali or flower gardener division, do nothing but grow flowers. Though poor they are frugal and live within their means. Marathas are a large but poor class. Some are petty shopkeepers selling mutton liquor and betelnut and tobacco. Many are husbandmen and market gardeners, and this section has greatly prospered since the opening of the Khadakvasla canal. But many, perhaps one-half, are idle and debauched. Mochis or Shoemakers are are of two classes Madrasis and Pardeshis. The Madrasis, whose home tongue is Tamil, are excellent workmen both as boot and shoe and as harness makers. Chiefly through their skill Poona made European boots are in demand all over the Deccan and in Bombay. They are highly paid and might have constant employment, but they are idle and given to drink. Most of them always spend some drunken days after getting their wages. They eat flesh, including beef, daily, and have lately taken to coffee drinking. Pardeshi Mochis from Bengal speak Hindustani at home and are generally single. They are clever workmen making boots and shoes for Mehmans, who send them to Bombay and other parts of the Presidency. They eat flesh except beef, and drink liquor. Shimpis or Tailors are of two main classes Namdevs and Jains, and among Namdevs are two divisions Marathas and Telangis. The Namdevs and Jains are bitter rivals according to the Namdev saying 'Spare a serpent, not a Jain Shimpi.' Most of them live in Main street. They are hardworking and careful but given to drink. Their chief business is selling cloth and clothes. Sonars or gold and silver smiths, some of whom are Panchals or anti-Brahman Sonars and others ordinary Maratha Sonars, live chiefly in Main street. They have good employment both from Europeans and Natives and are well-to-do.

Streets.

The Cantonment has eight principal streets, East, Main, Centre, Grain Market, West, Sachapir, Dadabhai Bhootee, and Sholapur and Bhavani Peth Roads. East street, 4200 feet long, contains the principal shops for the supply of Europe goods and articles of dress and clothing. Main, street, 4680 feet long, contains 347 houses. The larger Bohoras' shops and tailoring establishments and sellers of Europe spirits wines and beers are established in this street. Centre street, 2280 feet long, contains 239 houses with shops of Vani grocers. Grain Market street, 480 feet long, contains twenty-eight houses chiefly occupied by grain dealers. West street, 3420 feet long, is a great thoroughfare to the west of the Sadar Bazar running from north-west to the south of the bazar, beginning at the Jamsetji fountain and terminating south of the Malcolm pond. Sachapir street 1800 feet long and containing, eighty-one houses is one of the approaches to Poona city from the cantonment. Dadabhai Bhootee street, called after its chief resident Mr. Dadabhai Bhootee, is 1980 feet long and contains thirty-two houses. The large Gaylivada in the old Modikhana quarter lies to the north of the street. Sholapur road 2040 feet long has the Government Bakery and the large business buildings of Messrs. Morgan and Balkrishna, auctioneers and merchants. To the south of the road near Messrs. Balkrishna's premises is a neat row of buildings used as residences and shops. Bhavani Peth road, 720 feet long, contains twenty-six houses chiefly occupied by Marwar moneylenders.

Management.

The management of the cantonment is in the hands of a cantonment committee of thirteen members, nine official and four non-official, under the presidency of the Officer Commanding the Station and with the Cantonment Magistrate as Secretary. [The official members are: The Collector and District Magistrate, the Divisional Deputy Surgeon General, the Executive Engineer, three officers in monthly rotation Commanding Regiments stationed at Poona, the Civil Surgeon, the Executive Engineer for Irrigation, and the Cantonment Magistrate.] Subject to rules passed by Government this committee at monthly or more frequent meetings fixes the strength and the pay of the cantonment staff. Under the control of the committee, the Cantonment Magistrate as executive head manages the conservancy and sanitation of the cantonment which for conservancy purposes has been divided into eleven wards. The conservancy staff clean private latrines and remove nightsoil from private houses at a monthly charge of 6d. to 1s. (4-8 as.) from each house. [The strength of the conservancy staff is 103 road sweepers and 96 nightsoil men, supervised by twelve supervisors or *mukadams* and two inspectors.] In all parts of the cantonment, not in the charge of regimental or other special establishments, the cantonment conservancy staff remove all filth and rubbish from the public roads and streets, from public latrines slaughter-houses and other places, from receptacles provided for filth and rubbish, and from public and private premises to the committee manure yard about half a mile east of the Sholapur bridge and north of the Sholapur road beyond the new cemetery (60). From the cantonment fund the Sadar Bazar and other parts of the cantonment are kept clean. The Sadar Bazar streets are lighted by 456 kerosine lamps, the posis made of iron in Bombay and the lanterns, also of iron, in Poona. The streets are provided with surface drains which are twice flushed daily to carry off house sullage, the

water draining into the Manik watercourse or *nala*. Eight large public cisterns for free drinking water, three stand-pipes two at Ghorpadi and one at Vanavdi, and large sheds of fourteen blocks containing 428 stalls, five containing 144 stalls in Sholapur Bazar and nine containing 284 stalls in Old Modikhana near Dadabhai Bhootee street for milch cattle, have also been provided. There are two slaughter houses, one for bullocks and cows, the other for sheep and goats. The buildings are close to the Government slaughteries south of the Military Prison (85) on the road to Kondva village. The daily average of animals slaughtered is, in the fair season, sixty-five sheep and goats and eighteen cows and calves; and in the monsoon 120 sheep and goats and eighteen to twenty cows and calves. In the west and north-west the roads are daily watered during the dry months, and the most frequented roads are, in dark nights, lighted by 456 kerosine lamps. ID 1883-84 the cantonment had, including a balance of £6797 (Rs. 67,970), an income of £16,081 (Rs. 1,60,810), and an expenditure of £15,907 (Rs. 1,59,070). The chief sources of income are octroi duties and property rates, licenses, and fees and passes; the main charges are under conservancy, public works, and lock-hospital.

Garrison.

The normal strength of the Poona garrison is 4620 of whom 1165 are Europeans and 3455 Natives. The accommodation for troops in Poona provides for a garrison of two European Infantry regiments, one Mountain Battery, one Native Cavalry Regiment, and three Native Infantry Regiments. Of these troops the two European Infantry Regiments are in the Ghorpadi and Vanavdi Barracks, details of which are given below under Objects (70 & 116). The Mountain Battery is in the old Horse Artillery Lines about half a mile south-east of the Vanavdi Barracks. The Native Cavalry Regiment is in the Native Cavalry Lines about three quarters of a mile north-east of the cantonment (109). The three Native Infantry Regiments are in the right flank, centre, and left flank lines between the Vanaydi and Ghorpadi European Barracks. There are also, besides Commissariat buildings, the Transport Lines about three quarters of a mile west of St. Mary's church (109), For the treatment of European troops there is one Station Hospital in the Vanadi Lines and one small Staff Hospital. Each of the Native Regiments has its own hospital. There is also a first class Lock Hospital with a medical officer in charge and 224 registered prostitutes. The Lock hospital rules are in force within three miles of the cantonment. [Benson's Compendium of Information regarding Poona, 15-16, 22-23, 26,43.]

History.

The [Contributed by Mr. A. H. Plunkett.] Poona cantonment dates from the battle of Kirkee and the capture of Poona city on the 5th and the 17th of November 1817. After the capture of the city the troops were encamped in tents on the spot now called the Ordnance Lines. The troops were attended by Vani grain dealers and other traders whose two lines of thatched hats, now in Main and Tabut streets, were the beginning of the Sadar Bazar. As has been noticed under population the next additions were Parsi traders from Sirur and Bohora Musalman traders from Poona soon after the market was started, and Mehman Musalmans from Cutch about 1835. The Sholapur Bazar, about 500 yards south-east of

the Sadar Bazar, was started at the same time (1818) by the Madras Pioneers whose camp was on the site of the present Transport Lines. The break up of the Queen's Bazar on the site of the Vanavdi Ball Alley further strengthened the Sholapur Bazar. The Vanavdi Bazar was established about 1825 near the site chosen for an encampment of a brigade of Artillery. About this time Bishop Heber mentions the cantonment as lying on raised ground to the east of the city. The streets were wide and the cantonment well arranged and handsome. There was a good station library for soldiers and another for officers, regimental schools, and a spacious and a convenient church but in bad architectural taste. [Narrative, II. 208 - 209.] The Ghorpadi Bazar was started in 1844 on the spot where the Ghorpadi hospital stands. It was afterwards moved east to its present site. Behind the Council Hall (52), on the site afterwards held by the Sappers and Miners, a native cavalry regiment was stationed and a bazar sprang up. All traces were cleared away in 1882 when the Sappers were moved to New Jhansi (88) in Kirkee. Barracks were built at Ghorpadi in 1842, 1849, and 1880, and large double storeyed barracks at Vanavdi between 1861 and 1872.[The details are given below under Objects (70 and 116).] The first houses for regimental officers were built on the site of the present Native Infantry lines. The houses at first were temporary thatched buildings made by Parsis and other traders in the Sadar Bazar. With the increase in the number of troops rows and groups of residences have been built first at Vanavdi, then at the Neutral Lines, and then at Ghorpadi. From the growing importance of Poona as one of the head-quarters of Government, the demand of civil and military officers for houses and offices has steadily increased and has led to the building of the staff lines to the north of the cantonment in the direction of the railway and the river.

Kirkee Cantonment.

The cantonment of Kirkee on the right bank of the Mutha, about four miles north-west of the Poona Cantonment, includes an area of about 2709 acres. It is bounded roughly on the north and east by the Mula, on the south by a line drawn from the old Government gardens to the top of the ridge on the parade ground, and on the west by a line from the parade ground ridge to the Mula river. It is a flat plain except close to the river where it is scored with water courses. To the north and west much of the land is barren and rocky growing little but grass and a few stunted trees. To the north-east are patches of rich soil watered by a canal from Lake Fife and growing rich crops of sugarcanes. Much of the south is closely covered with young *babhul trees*. Most of the roads are well shaded. There is only one Europe shop, and the houses are almost all small, with large trees round the enclosures, within which however there are few shrubs or flowers.

Kirkee is the principal Artillery station in the Bombay Presidency and is the head-quarters of the Bombay Sappers and Miners. The garrison of Kirkee includes the Bombay Sappers and Miners, one battery of Royal Horse Artillery, two Field Batteries, one company of European Infantry, and one company of Native Infantry. The presence of the Powder Works (72) and the Small Arms Ammunition Factory (104) give Kirkee a special military importance.

The Kirkee Bazar was established in 1822 by the 4th Light Dragoons who came here from Kaira in Gujarat. Kirkee Cantonment has thirty-three bungalows owned by Parsis and Hindus, and rented by the military officers stationed at Kirkee, and by the subordinates of the Gunpowder and Small Arms Ammunition Factories. In a market place or bazar are 464 houses generally single storeyed, the walls of burnt brick or stone, and the roofs of 432 tiled and of thirty-two thatched. Besides the troops and the European and other mechanics employed in the Small Arms and Gunpowder Factories, the population consists of servants of officers and their families, and grasscutters, butchers, cowkeepers, grainsellers, woodsellers, petty traders, and others usually found in a large regimental bazar. The cantonment has one palm liquor, one country spirit, one opium, and two European liquor shops.

The cantonment has one Muhammadan burying ground, and a Hindu burning and burying ground to the north of the bazar, and two Christian graveyards, one, now closed, at the corner between the main road and the north end of Holkar's Bridge (75), and the other, now in use, to the right of the road from Holkar's Bridge to the Gunpowder Factory.

The income of the Kirkee Cantonment Funds for 1883-84 was, including a balance of £424 (Rs. 4240), £1337 (Rs. 13,370) and the expenditure £1072 (Rs. 10,720). The chief sources of income are a grazing fund, fees, passes, taxes, and licenses, and they chief heads of expenditure are a Lock Hospital and conservancy. The Cantonment is managed by a committee composed of the Commanding Officer at Kirkee as the permanent President, and eight members, the Collector and District Magistrate, the Senior Regimental Officer, the Senior Medical Officer, the Officer Commanding the Sappers and Miners, the Executive Engineer Poona and Kirkee, the Medical Officer in charge Kirkee Lock Hospital, the Cantonment Magistrate Poona and Kirkee, and the Station Staff Officer. The commitee meets monthly for the transaction of business. A military officer is secretary to the Kirkee Cantonment committee, and is the executive head of the establishment maintained from Cantoment funds. The Cantonment Magistrate, Poona, has charge of the magisterial work of the cantonment. All criminal cases arising at Kirkee are either sent to Poona for trial or are tried at Kirkee by the Cantonment Magistrate, Poona.

The New Jhansi lines in which are the Sappers and Miners, have lately been built to the south-east of Kirkee. The bazar attached to the new lines is small, including about fourteen houses which are chiefly occupied by the followers and petty dealers attached to the corps. For cantonment purposes the New Jhansi lines are included in the station of Kirkee.

Suburban Municipality.

The Civil Lines or Suburban Municipality, started on 12th February 1884, includes an area of about one and three quarters of a square mile lying to the north-west of the Poona cantonment. This area is divided by the railway into two nearly equal sections. The south-railway section has a length from the railway south to the Synagogue (113) of about 1200

yards, and from about the same breadth in the north, from the west end of the railway station (97) to the Council Hall (52), it gradually narrows to about 300 yards in the south. The north-railway section is a rectangular block about 1200 yards from north to wrath from the railway to the river, and about 1500 yards from east to west from the Koregaon road to a line running from the east end of the railway station to the river. Most of the north section, especially towards the river, is rich black soil cropped and well wooded. It contains the Bund Gardens (47) in the north and four groups of houses, the four houses or Char Bungalows parallel to and about a hundred yards to the west of the Koregaon road; houses on both sides of the Bund Garden road which crosses the section from its southwest to its north-east corner; and in the west Sir A. Sassoon's bungalows in the extreme north-west of the Civil Lines, that run north from the east end of the railway station. Except in the west, where is rich cropped land, most of the south-railway section is like the cantonment of poor soil and the style of houses and gardens is much the same as in the west parts of the cantonment.

For conservancy purposes the Suburban Municipality is divided into three wards, one, including the parts on the north of the railway line up to the river; the second the part south of the railway line up to the city limits; and the third the parts along Kirkee road from the railway overbridge near the Sangam (99) to the Kirkee Cantonment boundary near the shop of Messrs. Cursetji and Sons.

The suburban municipal limit includes 184 houses, 135 of them bungalows with a total population of 2597 and during the rains of about 3000. The chief residents are European Government officers and some Native gentlemen. Near the railway station are some livery stables, a mixed shopkeeping native population forming the suburban municipal bazar. The lands included within suburban limits are under the management of a committee of sixteen, of Whom, besides the Collector and District Magistrate who is President, five are official and ten are non-official. The income, which is drawn from octroi, house-tax, conservancy-rate, and license fees, amounts to about £800 (Rs. 8000). The monthly charges, estimated at about £26 10s. (Rs. 265), are chiefly under staff and conservancy. At present the chief conservancy duties are sweeping roads, taking rubbish from houses and gardens, and carting away nightsoil.

Within suburban limits are sixteen objects of interest of which details are given later on. These are the Bund Gardens on the river bank about a mile and a quarter to the north of the post-office; the Collector's Office about a quarter of a mile west of the post office; the Boat-house of the Poona Boat Club on the river bank west of the Bund Gardens; the FitzGerald Bridge across the Mula-Mutha at the east end of the Bund Gardens about a mile and a quarter north of the post office; Gar Pir's tomb about 150 yards south of the post office; a graveyard with old European tombs (1819-1822) about 200 yards south of the post office; the Jamsetji Bund across the Mula-Mutha to the north of the Bund Gardens; the Military Accounts Offices about 100 yards west of the post office; the Photozincographic Office about fifty yards west of the post office; the Poona Hotel about 150 yards east of the post office; the Post Office near the centre of the south-railway section; the Railway Station about 650 yards north-west of the post office; the Royal Family Hotel close to the railway station; the Sassoon Hospital about 500 yards west of

the post office; St. Paul's Church about fifty yards south of the post office; and the Synagogue about 500 yards south of the post office. The [From materials chiefly contributed by Colonel W. M. Ducat, R. E. Much help has also been received from Colonel C. D. U. LaTouche and Major Benson's *Compendium* of Information regarding Poona.] following are the accounts, alphabetically arranged, of the chief objects of interest outside the Poona City municipal limits

Objects

Albert Edward Institute(41).

The ALBERT EDWARD INSTITUTE is in East Street Sadar Bazar. The institute, which consists of a reading room and a library with sixty-one members, was built to commemorate the visit of His Royal Highness the Prince of Wales to Poona in November 1875. The building cost about £1500 (Rs. 15,000) and was opened by His Excellency Sir James Fergusson, Bart. Governor of Bombay, on the 12th of September 1880. The institute is open daily from 6 A.M. to 9 P.M. The library contains 1000 volumes.

Arsenal(42).

The ARSENAL, with a notable masonry tower about 1000 yards south-east of the post office, covers an area of about 160 yards by 100 on the high ground to the north of the Club of Western India in the north of the Native Infantry lines. The Arsenal was built in 1822 and various additions have since been made. The charge of the Commissary of Ordnance at Poona has been reduced from an Arsenal to an Ordnance Depot for which some of the old Arsenal buildings are now used. Others of the buildings are used by a branch of the Gun Carriage Factory. The buildings represent a value of £5634 (Rs. 56,340) on the books of the Executive Engineer Poona and Kirkee.

Band Stands(43).

There are two BAND STANDS or places where military bands play. One of these is in the Soldiers Gardens, to the east of the Race Course in cantonment limits, the other is at the Bund Gardens in suburban municipal limits.

Baptist Chapel(44).

The BAPTIST CHAPEL, of brick and mortar, was built in 1858 at a cost of about £2000 (Rs. 20,000) most of which was contributed by General Havelock. The chapel has room for 500 people and morning services are held on Monday, Wednesday, Friday, and Sunday and an evening service on Sunday. It has a baptistry, a vestry, a library, and a school in the city. In the beginning the building was chiefly used for Havelock's men, Highlanders, and other British soldiers. Of late the congregation has become almost entirely native.

Bhamburda(45).

BHAMBURDA village, with about 3120 people, lies on the left bank of a the Mutha, 1.83 miles west of the post-office and a quarter of a mile north of Poona city, with which it is joined by the Lakdi bridge and a causeway or *dharan*. A large cattle market is held every Wednesday and Sunday, at which 100 to 150 bullocks, twenty to thirty cows, ten to fifteen buffaloes, fifty to eighty sheep, and as many goats, are usually offered for sale. From *A'shvin* or October -November to *Margshirsh* or December-January the number of cattle is larger, being at the highest thrice the number given above. Large stores of grass, millet stalks, and fuel are kept in the village for the use of Poona city. Within the village limits are several European residences and the old rock-cut temple of Panchaleshvar of which details are given under Panchaleshvar (90). In 1801 Vithoji Holkar was captured in a house in Bhamburda village, and by order of Bajirav Peshwa to please Sindia, was dragged to death at the foot of an elephant through the streets of Poona. It was Yashvantrav Holkar's rage at his brother's murder that led to the flight of Bajirav from Poona and the treaty of Bassein (30th December 1802).[Grant Duffs Marathas, 554.]

Botanical Gardens(46).

The BOTANICAL GARDENS, about half a mile north of Government House Ganeshkhind and 52 miles north-west of the post office, are under the management of a superintendent who is under the control of the Collector of Poona and the Commissioner Central Division. These gardens have now (July 1884) been transferred to the Soldiers' Gardens in the east of the cantonment. Details of their past working are given in the Agricultural chapter. [Part II. pp. 77 - 80.]

Bund Gardens(47).

The BUND GARDENS, on the right bank of the Mula-Mutha river about a mile and a quarter north-east of the railway station, close above the FitzGerald bridge, take their name from the Jamsetji Bund or Dam which there stretches across the river. The gardens measure about 180 yards from east to west by about eighty yards from north to south. They were opened in 1869 when the FitzGerald bridge was finished to which they form the approach from the Poona side. They were designed and made by the late Colonel Sellon, R. E. whose taste and skill turned an unsightly plot of waste into a pleasing and varied garden. The grounds are laid out in terraces to which flights of handsome cut-stone steps lead, the lowest terrace overlooking the river being faced by a massive wall about thirty feet high. In the centre of the garden is an ornamental marble fountain, and, on the west, near the carriage stand, is a bandstand where a military band plays two or three times a week. These gardens are beautifully planted and kept in careful order and are the favourite resort of the people of Poona of all classes.

Chatarshingi Hill (48).

CHATARSHINGI HILL, about three miles north-west of Poona, has a temple of Chatarshingi Devi. According to a local legend Dullabhshet, a rich banker, who in 1786 coined the two-barred copper corns known as *dudandi* or *shivrai*, used to go every year to the temple of Saptashringi about thirty miles north of Nasik. When he grew old, the

goddess took pity on him, and coming to the Chatarshingi hill, told him in a dream that he might worship her at Chatarshingi hill and need not in future go the Saptashringi. The temple stands on the hill slope on a site made partly by cutting into the rock and partly by banking soil with a high retaining wall. The main temple is a small room with an open porch, a vault, and a conical spire, all of stone. Beyond, on a lower level, is the wood and brick hall or *sabhamandap* with a tiled roof. A fair is held at the temple during the nine *navratra* days before *Dasara* in *Ashvin* or September-October to which people come in large numbers from the city and have merry picnics. The ascent is by a rude flight of steep stone steps. The temple enjoys a small allowance from the Parvati temple revenues. Offerings of goats are made to the goddess during the fair days and vows of goats are common throughout the year. A *hom* or sacrifice of clarified butter, cooked rice, and pieces of holy wood is performed on an altar during the *navratra* holidays.

Club of Western India (49).

The CLUB OF WESTERN INDIA, at the north end of Elphinstone street about a mile and a quarter south-east of the railway station, stands in an enclosure about 200 yards long and 150 yards broad. The Club-house is a one-storeyed building, entered from a large porch flanked by a lavatory and the Honorary Secretary's office room. Inside is the drawing room (45' by 18' by 18'). To the left, opening out of the drawing room by wide archways and almost forming part of the room, are two recesses one used as a card room the other as a magazine room. To the right are smaller recesses lined with book shelves. Including these recesses the size of the drawing room section of the club is about fortyfive feet square. Beyond the drawing room and occupying the centre of the building is an octagon room seventeen feet each way, devoted to the newspapers of the day and to subscription lists. To the left of the octagon is the writting room. To the right, an open porch or veranda (45' by 30') used as a reading and smoking room, projects into the garden. Beyond the octagon, and flanked north and south by verandas, is the coffee room or dining room (60' by 30' by 24'). Beyond the coffee room, and connecting the main building with the billiard room, is a roofted gallery (54' by 36') in which the members of the club dine in the hot weather. The billiard room (50' by 25' by 15') completes the main range of the club buildings. To the north of this range are the club chambers, built in 1866, a one-storeyed block of five sets of rooms which are let unfurnished and cannot be engaged for a shorter period than one month. North of the club chambers is a twostoreyed block built in 1875 and containing eight sets of apartments known as the new bed rooms.

These are furnished and cannot be engaged for more than fourteen days in the season (1st June-31st October) or a month at other times of the year. Behind the club is the original range of bed rooms built in 1866 and now known as the old bed rooms. This range contains seven sets of rooms which are let on similar terms to the new bed rooms. Behind the chambers, and close to the eastern boundary of the club enclosure, is a covered racket court built of stone in 1868. Behind the line of main buildings, chambers, and new bedrooms, the north and south ends of the club enclosure are occupied by servants' quarters, stables, and other outhouses. The club buildings were formerly in two enclosures and were bought from their former owners when the club was started in 1866.

The bungalow, which formed the nucleus of the club-house, was owned by Mr. Padamji Pestanji and was last occupied by Colonel D'Oyly Compton. It was long known as the Sholapur or Sholapur thatch bungalow, tradition says because it used to be thatched in a fashion common at Sholapur but uncommon at Poona. The enclosure in which the chambers and new bedrooms stand was the property of Nandram Naik a wealthy contractor and house proprietor. At present (July 1884) large additions are being made to the club-house and grounds.

Collector's Office(50).

The COLLECTOR'S OFFICE, in suburban municipal limits about 700 yards south of the railway station and about 400 yards west of the post office, includes several detached buildings in one enclosure. These buildings are divided into seven parts, the Collector's office, the treasury, the bookbinders' shed, the Registrar's office, the treasury record room, the stamp paper room, and the treasury guard room. All are old buildings to which additions have been made from time to time. A witness shed and record room were added in 1881 at a cost of £648 (Rs. 6480). Designs have been prepared by Colonel, now General, St. Clair Wilkins, R. E. for a Collector's office agreeing in style with its near neighbour the Sassoon Hospital.

Convent(51).

The POONA CONVENT, near the centre of the Sadar Bazar about 550 yards west of the Club of Western India, is set apart for the education of the orphan children of British soldiers. A day school for girls and a free school for the poor complete the establishment which is managed by the Religious Ladies of Jesus and Mary. The convent is a pretty little cutstone building in grave Gothic style with a roof of Mangalore tiles. It was built in 1865 from public subscriptions, Government doubling the amount subscribed. The entire cost, including a home for destitute women added in 1872, was £8000 (Rs. 80,000).

Council Hall.(52).

The COUNCIL HALL, a large two-storeyed building with central tower, is on the west border of cantonment limits about half a mile south-east of the railway station and about 700 yards north-east of the post office. It was originally bought by Government for £5087 10S. (Rs. 50,875), and has Been almost entirely rebuilt and greatly enlarged. It is a double-storeyed building nearly rectangular in plan, 183' by 53' and 40' to the top of the walls. It is in the Venetian-Gothic style of ornamental coloured brickwork. The porch in the middle of the west face is surmounted by a tower or campanile 76' high with low-pitched tiled roof. The original building, which was bought by Government as a Council Hall, is so small a part of the present hall that the present building may be looked on as new. On the ground floor at the north end and stretching above the first floor to the roof is the Council Hall, 80' by 40' and 40' high. It is surrounded on three sides by a gallery six feet wide supported on light iron cantalevers. The Council Hall is painted white picked out with gold and the planked ceiling is treated in the same way. At the south end are two rooms, each 30' by 20' with an archway between and enclosed on the outside by a cloister

12' wide. These are used as a picture gallery and contain numerous portraits chiefly of Indian Princes and Chiefs. Opposite the centre is an entrance hall 17' by 17' beyond which is the staircase. On the first floor, over the picture rooms, are two similar rooms, one used by the Governor and the other by his Private Secretary. These, like the rooms below them, are surrounded by cloisters with open stone mullioned windows. The hall was designed and built by Major, now Colonel, Melliss then Executive Engineer, Poona, and was completed in 1870 at a cost of £12,294 (Rs. 1,22,940) including some small outhouses, and exclusive of the cost of the old building.

Deccan College (53).

The DECCAN COLLEGE stands on rising ground about half a mile back from the left bank of the Mutha river, 2.93 miles north of the post office and about five miles northeast of Poona between Poona and Kirkee cantonment. It was completed in 1868 at a cost of £24,596 6s. (Rs. 2,45,963) of which £12,500 (Rs. 1,25,000) were contributed by Sir Jamsetji Jijibhai Bart. It is in the Gothic style of architecture, designed by Captain, now General, St. Clair Wilkins, R. E., and built of gray trap with high-pitched red iron roof. It is a double storeyed building, two wings (each 154' by 26') forming with the main building (242' by 524') three sides of a quadrangle to which there is a vaulted, carriage entrance beneath the tower close to the north-west angle. All three of the inner faces are arcaded on both storeys, the arcades being 10½' wide. At the north-west corner of the main block is a masonry tower 106 feet to the top of its high pitched roof. The whole of both wings are occupied by quarters for the students, including thirty-one rooms below (each 10' by 6') and twenty rooms above (each 21' by 104'). The main building contains in its lower storey two class rooms 20' by 20', two 241/2' by 161/2', and a laboratory 241/2' by 34'. In the upper storey are the large College Hall (70 by 25' and 24'high)used as a library as well as on public occasions, and four other class rooms two of 201/2' by 201/2' and two of 21¾' by 20½' besides the Principal's room (16½' by 16½') under the tower. The out-buildings include a block of eight rooms with a cook-house for Hindu students; a block of three sets of two rooms each with cook-room for Dakshina Fellows [Details of the Dakshina fund are given above under Instruction, pp. 48,62-64.]; and a Parsi cookhouse and wash-house.

European East Street Graveyard (54).

East Street has an OLD EUROPEAN CEMETERY, in the form of a trapezoid, with an area of 1.54 acres. It is situated between the Main street of the sadar Bazar and East Street, the houses in the former standing close to the compound wall. The cemetery contains 231 masonry monuments and headstones, many of which are in good condition, but several are falling to decay. The dates on the inscriptions range from 1823 to 1846. Two tombs bear the date 1855 and one 1856. A Government gardener under the orders of the Chaplain of St. Paul's church looks after this cemetery and the one near St. Paul's church; and the compound enclosure is kept in good condition by the Public Works Department.

European Garpir Graveyard (55).

About 200 yards to the south of the Collector's office, and close to the north of the Musalman Garpir graveyard, in a small enclosure surrounded with a brick wall and containing two old tamarind trees and some young *nims* and Mellingtonias, is an old EUROPEAN BURYING GROUND with seventeen tombs. One is a beautifully built cutstone canopy supported by pillars on a cut-stone plinth. The rest, some of stone and others of cement-covered brick, are plain tombs about eight feet long by three wide and three or four high. The large canopy tomb has no date or inscription. It is said to mark the grave of a French officer in the Peshwa's service. But as the last Peshwa had no French officers this tradition is apparently inaccurate. [According to another account (Chesson and Woodhall's Miscellany, VII. 59) the tomb is of a lady named Mrs. Virges, whose husband, who was Deputy Paymaster of the Poona Pi vision, went to Calcutta to bring her statue but never returned nor sent the statue.] The inscriptions on the other tombs vary in date from 1819 to 1822.[One to Captain John Lewis of the Poona Auxiliary Horse is dated 10th August 1819, another to Captain Samuel Halifax, Bombay European Regiment and Deputy Adjutant General, is dated 26th January 1820.]

European Ghorpadi Barracks Graveyard (56).

The EUROPEAN GRAVEYARD at Ghorpadi lies about 300 yards beyond the north-east boundary line of the Cantonment, and is intended for the interment of troops dying while quartered in the Ghorpadi Barracks. It is a square piece of ground, with an area of 1.86 acres, surrounded by a masonry enclosure wall; one-half of the cemetery is alloted for the Church of England community, and the other half is allotted between Roman Catholics and Nonconformists. There are 233 graves in the Church of England portion, 189 in the Roman Catholic portion, and twenty in the Nonconformists portion, or 442 in all. The earliest date on any of the tombs is 1864. The cemetery is well planted with trees and shrubs, and is looked after by the authorised, establishment.

European Sangam Graveyard (57).

On the right bank of the Mula from 300 to 400 yards west of 'The Sangam' is an oblong enclosure twenty-four yards long by twenty-one wide. The enclosure contains twenty-one tombs one of them high and surmounted by a monumental urn. Except one tomb, inscriptions have disappeared from all and cavities remain to mark which of them contained inscription stones. The tomb with the inscription has a cavity for an inscription stone at the other end of the grave, which shows that more than one person is buried in the same grave. The inscription' Sacred to the memory of Mrs. Caroline Lodwick who departed this life January 29th 1819, leaving a husband and three daughters to deplore their irreparable loss. [Mr. T. M. Filgate.]

European Kirkee Battle Graveyard(58).

This cemetery is also known as the "BATTLE of KIRKEE GRAVEYARD" where the bodies of some of the slain in that battle were buried. It was originally the Residency cemetery, the old Residency standing where the Judge's house now stands. [Mr. T. M. Filgate.]

European Satara Road Graveyard(59).

The EUROPEAN SATARA ROAD GRAVEYARD lies on the south-west boundary of the cantonment near the Lal-bag, 205 miles from the Poona post office. It is an irregularly shaped piece of ground with an area of 5.07 acres, and is surrounded by a masonry compound wall The cemetery is divided into three portions, one for the Church of England with an area of 3.09 acres, one for the Church of Scotland with an area of 0.74 acre, and one for Roman Catholics with an area of 1.24 acres. A masonry wall divides the Church of England from other portions; and the Roman Catholic and Church of Scotland portions are divided from each other by a range of boundary stones. There are about 2000 graves in the cemetery, of which 1265 are in the Church of England portion, 505 in the Roman Catholic portion, and 250 in the Church of Scotland portion. The dates on the tombs range from 1845 to 1883. There are many well grown trees in the cemetery and numerous plants and shrubs, which are taken care of by the Government gardener under the Chaplain of Poona. The cemetery is very thickly filled with graves in several parts and has been closed. [Benson's Compendium, 43.]

European Sholapur Road Graveyard (60).

The NEW POONA CEMETERY lies about a quarter of a mile beyond the Cantonment eastern limits on the Sholapur road and 3.07 miles from the Poona post office. The enclosure wall out-buildings and approach were finished in 1882, and £900 (Rs. 9000) have been spent in the planting of trees, construction of roads and paths, and in improving the water-supply of the cemetery, which is from three draw-wells, each provided with a Persian wheel for raising water. The cemetery has only one entrance gateway, which is surmounted by a neatly moulded Gothic arch, gabled and coped with cut-stone. A cleanly cut and appropriately designed cut-stone cross rests on the apex of the gable, and adds much to the appearance of the entrance. The out-buildings, consisting of two burial sheds, two chaplain's rooms, and watchmen's quarters, are of coursed rubble masonry, with a Mangalore tiled roof constructed in Gothic pitch, gabled at either end in front of the two burial sheds, and finished with ornamental eaves and large boards. The total area of the cemetery is 12.82 acres, which will afford space for 5291 graves. Onehalf of the cemetery is allotted for the Church of England community and the other half divided between the Roman Catholics and Presbyterians, allowing the former double the space allotted to the latter. The portions for the different denominations are merely separated from each other by paths. [Benson's Compendium, 44.]

European St. Paul's Church Graveyard (61).

ST. PAUL'S CHURCH GRAVEYARD near St. Paul's church, is an old European graveyard, a rectangular plot of ground with an area of 9890 superficial feet, surrounded by a good masonry wall with a neat iron gate. The cemetery is kept very clean; but only seventeen graves are at present visible, and these are marked by masonry tombs, on four of which only inscriptions now remain, and these bear the dates 1819, 1820, 1821 and 1822.[Benson's Compendium, 43.]

Fire Temples (62).

Poona has two FIRE TEMPLES. One of these in the north of Nana ward in the west of the city, was finished on the 6th of August 1824 by Mr. Sorabji Ratanji Patel a Sardar of the Deccan and was rebuilt in 1877 by Khan Bahadur Dastur Nasarvanji Jamaspji. The second fire temple is in the Camp close to the office of the Poona Observer paper. It was finished on the 29th of November 1844 by Sir Jamsetji Jijibhai. To the east of the temple, in the centre of a three-cornered plot, is a fountain called the Jamsetji Fountain.

FitzGerald Briedge (63).

The FITZGERALD BRIDGE, better known as the Bund bridge from its position on the Mula-Mutha river, close below the Jamsetji Bund or Dam, is a handsome as well as a substantial structure carrying the Poona and Ahmadnagar road across the river. It consists of thirteen elliptical arches each of 60' span with a rise of 15½ and an arching 2' 9" thick. The roadway, which is 28' wide including a 6' side walk, is carried at a height of 48 above the deepest part of the river bed, and is enclosed by handsome open work cutstone parapets 4' high. The bridge was designed and built by Captain R. S. Sellon, R. E. Executive Engineer Poona District, and completed in 1867 at a cost of £24,180 (Rs. 2,41,800).

Free church Mission Church (64).

The FREE CHURCH MISSION CHURCH is a plain stone and brick building in early English style built about 1870 at a cost of £1500 (Rs. 15,000). The church has room for a congregation of 180 Europeans Eurasians and Natives. The church has an organ and holds services twice a week. There are sixty communicants and sixty adherents and a Sunday school attached.

French Tombs (65).

To the east of the Ghorpadi Lines, in a grove of *babhul* trees, on the left bank of Bahiroba's stream, is a small enclosure with one large and several small Christian tombs. Some have inscriptions which the weather and the rain-drip from the trees have made unreadable. The only name that can be read is that of Madame Dud(f?)rencque, perhaps the wife of the DudFrenec whom Grant Duff mentions as a general in Tukoji Holkar's army in 1794.[Marathas, 498, 501.] The other tombs are believed to belong to French officers, probably of Sindia's and Holkar's armies, who died in Poona towards the close of the last century. A tablet in the graveyard bears these words, 'Madame DuFrencque. Officers and others buried here up to A.D. 1817. Put in order 1876.'

French Tombs (66).

On the south of the road from Poona Cantonment to Parvati's temple, close to the west of Shankarseth's bridge, 2.53 miles from the Poona post office, stand four tombs supposed to be of French officers in Sindia's or Holkar's service in the latter part of the eighteenth

century. On one of the tombs is an upright cross backed by a stone slab. In the niches formed by the arms of the cross with the slab, lamps are placed by the neighbouring cultivators and by the R.C. priests of Panch Haud. At the foot of another tomb, consisting of a mass of stone about eight feet long and two feet high, some Hindus make offerings to Mari the cholera goddess, in whose honour the blood of a goat is poured on the ground before the tomb and small red stones are propped up against its sides. Of the two other tombs only one remains, an obelisk about fifteen feet high. On its pedestal is an inscription of which only the word *memor* can be read.

GaneshKhind Caves (67).

On the Bombay road, from near the south entrance to Government House, Ganesh khind, where there is a modern temple to Chatarshingi Devi, 4.08 miles from the Poona post office, the Bhamburda hills bend to the west and come back in a horseshoe curve to about the same position as the Chatarshingi Hill. At this point, about forty feet from the foot of the hill, approached by a rough path, is a small rock temple about 20' by 15' and 10' high. It was formerly bare and empty, but an ascetic or *Bava* has lately taken up his quarters in the cave and made a *ling* in the centre and rudely cut images of Vithoba and Lakshmi in the back wall. The Bava lives in a small corner of the cave which he has walled off. About forty yards to the west, and twenty feet up the hill side, are two cells and about forty yards further and a little lower is a dry water cistern. A fair is held every Friday at Chatarshingi, and on that day and on the last of the Navratra days in September-October people come to the temple of the Devi and go from it to the cave and breakfast there. The Chief of Jath is said to have consulted this Bava as to his chance of regaining the management of his estates, and has been at the expense of digging a large step-well which is still unfinished and of building a wall to strengthen the platform in front of the cave door.

Garpir Graveyard (68).

GARPIR, or the Quartz Saint Graveyard, is a Musalman graveyard about 150 yards south-east of the Collector's office and 250 yards west of St. Paul's church. It is across the road from the small Garpir European graveyard (55). In the Musalman Garpir graveyard, which is a large plot of ground with several old tamarind trees, are a few poor houses belonging to the guardians or mujavars of the tomb and many graves. It is entered by a poor gateway in the west wall. Passing south on the right is a large masonry well with flights of stone steps said to have been built by a Rani of Satara. A few paces to the south in the open air, surrounded by an open ruined trellis work, is the grave of the Quartz Saint, who, according to the ministrant, was one of the first Musalmans to settle in Poona and lived at the time (1290) of the two Shaikh Sallas. The saint's grave is a rough low cairn of the handsome blue white and pink quartz crystals which are found in the Sahyadris. When the saint died he left orders that no masonry tomb should be built over him; he was to lie in the open air under a pile of loose quartz stones. The Hindu worship of quartz, perhaps because it is a fire-holder, suggests that this place of worship is older than the Musalmans. [The object of worship in one of the Pandharpur temples is a quartz ling or Garicha Mahadev. Powdered quartz called rangoli ia also sprinkled on door-steps

and round dining places as lucky'or spirit-scaring. Details of the use of this quartz are given in the Dharwar Statistical Account, 821-822. With the quartz *ling* and the lucky quartz powder compare the conical masses of white quartz found in burial mounds in Inverary and Dundee in Scotland and in Letcombe Castle and Maiden Castle in England and the white quartz stones found in graves in the Hebrids and the Isle of Cambrae (Miss Gordon cumming, in the Hebrids, 45-46). The objects of putting white and fire-Yielding, and therefore spirit-scaring stones in the graves seems originally to have been to overawe the ghost of the dreaded dead, and, at a letter stage, to the scareevial spirits from the bones of the beloved dead.] The head-stone which peeps out from the crystals is also curiously like a *ling*. The crowded graves in the ground near show how highly the saint is respected. A few paces to the south is a small poor mosque. About eighty yards to the east of the mosque is a flat stone tomb with a loose headpiece. On the flat stone the following inscription is carved:

In memory of Allah Baksh valad Aisan Oomeranu Beeluch, for many years the faithful friend and servant of Sir Bartle Frere, K.C.B. Governor of Bombay. He died 20th July 1865 and was buried here. May God be merciful to him.

Formerly Garpir was important enough to give his name to the whole tract in the neighbourhood of St. Paul's church. In 1803 General Wellesley chose Garpir as the cantonment of the British force which was left to guard Poona, and this continued the cantonment till the final breach with Bajirav Peshwa in 1817. It was then found that the hedges and enclosures that ran close to the lines offered easy concealment either for the Peshwa's emissaries who wished to corrupt the British troops or for such of the troops as were inclined to desert. The bulk of the force was accordingly moved to Kirkee, a few days before the battle of Kirkee (5th November 1817). In the afternoon of the 5th of November, before the Peshwa's troops began to move from Poona, the rest of the troops were withdrawn to the Sangam and from the Sangam to Kirkee. [Details are giren below under Kirkee Battle-field, pp. 376 - 377.]

Ghashiram's Mansion (60).

To the west of the reservoir that lies to the west of St. Mary's church is a two-storeyed building of cut-stone with ornamental stone arches and pillars, and, in the west wall, an overhanging stone window with pillars and canopy. It was the gateway of the mansion of Ghashiram Kotval (1742-1791). All traces of the house have been removed and the yard is used as a commissariat store.

Ghashiram was a Kanoj Brahman of Aurangabad who rose to be the head of the Poona police by giving his daughter to be the mistress of Nana Fadnavis. Ghashiram used his power with great cruelty and injustice. On one occasion (30th August 1791) he confined a number of Telang Brahmans in a cell so small and so unwholesome that during the night twenty-one of the prisoners died of suffocation. Next morning, when news of these murders got abroad, the city rose and threatened to destroy the Peshwa's palace unless Ghashiram was executed. To quiet the mob the Peshwa gave up Ghashiram who was

stoned to death by the castefellows of the murdered men. [Moor's Hindu Pantheon, 372-373. Details are given below in the History of Poona city.]

Ghorpadi Barracks (70).

The GHORPADI BARRACKS form the front or westmost part of the Ghorpadi lines in the north-east section of cantonment limits. They consist of a number of single storeyed buildings with room for 652 rank and file besides Serjeants. Three sets of barracks have been built at different dates. The oldest, completed in 1842, includes twelve separate buildings, each containing a barrack room (97' x 24' X 12') to hold twenty-two men with a Serjeant's quarters at the end consisting of two rooms each 114'x 114'. The whole is surrounded by a veranda eight feet wide, open but protected from rain by weather-boards. About the same date (1842) were built the Patcherries or married men's quarters in four blocks of twenty quarters each. In 1849 a second set of twelve blocks was added. Each block contained a barrack room (113' X 24' x 18') to hold twenty-six men with a Serjeant's quarters (114' X 24'). Surrounding the whole was a veranda, 12' 6" broad, enclosed on the west from the monsoon by a dwarf wall surmounted by Venetians and glazed windows. The latest set of barracks, which was completed in 1880, consists of six blocks each containing a barrack room (166'x 25'x 20') with a Serjeant's quarters consisting of two rooms and a bath room, with a separate entrance, at the end. The whole is surrounded by a veranda 12' 6" broad enclosed on the west by strong Venetians. The last barracks with their outhouses are built after the latest sanitary rules. The plinths are high, the floors are of cut-stone paving, and ventilation is secured by an opening along the ridge covered inside by wire gauze and protected outside by an iron shield. The barracks have clerestory windows and the fanlights over the doors revolve. The space allowed for each man is 2400 cubic feet and 120 square feet of floor space. With their lofty open teak-planked roof and numerous glazed doors these barrack rooms look very spacious and airy. The lavatories and latrines are in detached buildings and have all the latest sanitary fittings. The barracks include all the buildings for work and recreation mentioned in the description of the Vanavdi Barracks and a chapel in addition. [See below Vanavdi Barracks (116).] The whole barracks have been built by successive Executive Engineers of Poona at a total cost of £68,378 (Rs. 6,83,780).

Government House(71).

GOVERNMENT HOUSE, GANESHKHIND from June till October the residence of His Excellency the Governor of Bombay, stands 4.36 miles north-west of Poona post office on rising land in the centre of a bleak rocky plain broken towards the south by low bare hills. The grounds round the house are well clothed with trees and shrubs. The House is in the centre of 512 acres of waving land, which have been laid out in roads and planted with trees to form ornamental grounds, and to give sites for the subsidiary buildings and houses for the staff. It was begun in 1864 during the governorship of Sir Bartle Frere and was finished in 1871. The main building is in the Italian-Gothic style of the local gray trap rock and was built by Mr. Howard C. E. from designs by Mr. Trubshawe. Its length of 300 feet run-ning north and south is broken into two double-storeyed wings connected by a lower central portion. The northern and larger wing carries a tower 100 feet high.

The south wing and centre contain on their ground floors the public rooms consisting of a Darbar or drawing room (80'by 30'), a large dining room (60' by 30') with arches on both sides, the back arcade opening into a large conservatory handsomely decorated in white and gold. On the upper storey are bed rooms. The north wing contains the Governor's office and rooms forming his private residence. Besides the outbuildings in more immediate connection with the house (which comprise a fine range of stables and coachhouses) the grounds contain four staff bungalows, a guard room with ornamental clocktower, and very complete European barracks for the Governor's band. About a mile to the west are lines for His Excellency's Native Cavalry Bodyguard, consisting of seventy sabres. The cost of the main building was £106,227 (Rs. 10,62,270) and of the whole in round numbers £160,000 (Rs. 16 lakhs).

Gunpowder Factory (72).

The [Contributed by Lieut.-Colonel Wake, R. A.] GUNPOWDER FACTORY lies 4.88 miles north-west of Poona post *Gunpowder* office and about 1½ miles north of Kirkee. The factory occupies a space of about 100 acres and, in order to guard against complete destruction from an explosion, the buildings used for the manufacture and storage of gunpowder are isolated. For the same reason about 500 acres of land round the factory are kept private.

Buildings.

The factory buildings include a number of store-rooms to hold the ingredients from which gunpowder is made and stores for working the engines and other machinery; a large repairs workshop worked by an eight horsepower engine; a building with machinery for making gunpowder barrels worked by a twenty-five horsepower engine; a number of houses for the various processes of powder-making, and, attached to them, engine and boiler houses with five engines two of twenty-five horsepower, one of twelve horsepower, one of eight horsepower, and one of six horsepower; a saltpetre refinery; a sulphur refinery; and a charcoal-burning house. Outside the factory near the Mula river is a twenty-five horsepower engine for pumping water into the factory in case of a failure of the regular water-supply and quarters for Europeans and Natives. The regular water-supply is brought by pipes from the Pashan reservoir near Ganeshkhind. The water is stored in large reservoirs for the various engines. Stand-pipes are scattered about whence a strong head of water may be drawn in case of fire.

Powder Verieties.

Five varieties of powder are made for Government Pebble powder lor heavy guns, R. D. G. 3-powder for medium guns, It. L. G. 2-powder for field guns, R. L. G. 2-powder for Martini-Henry rifles, and R. F. G. powder for Snider rifles. Powders for pistols and mealed powder for laboratory purposes are also made. The monthly outturn of the powders, which depend on the length of time they are incorporated, are pebble, R. L. G. 3, and R. L. G. 2 together about 45,000 lbs., R. F. G.-2 15,000 lbs., and R. F. G. 25,000 lbs. [These powder outturns give, for £1560 (Rs. 15,600) the total monthly cost of the

factory, a rate of about 9d. (6 as.) a pound for the first three varieties of pebble, R. L. G. 3 and R. L. G. 2., of 2s. $2\frac{1}{2}d$. (Re. 1-1-8) a pound for R. F. G. 2, and of 1s. 4d. ($10^2/3 as$.) a pound for R. F, G.] Each variety is made for a special purpose and has certain peculiarities. In regulating the peculiarities, the chief object aimed at is to obtain apowder which shall drive a projectile with the greatest rapidity without straining the cannon or small arm for which the powder is, intended.

Ingredients.

Gunpowder is made of three ingredients, saltpetre sulphur and charcoal, in the proportion of seventy-five parts of saltpetre, ten parts. of sulphur, and fifteen parts of charcoal. Saltpetre called grough in its crude state, is brought by contract from Cawnpur in Upper India. Before it is used saltpetre is refined to get rid of impurities which would affect the keeping qualities of the powder, and especially to ensure freedom from particles of stone or grit which would be an element of danger in the process of powder-making. Sulphur in its crude state is bought by contract and comes chiefly from Sicily. To get rid of stone and grit, before use, sulphur is refined by distillation. Charcoal is obtained by burning the stalks of the Cajanus indicus or *tur* plant. The wood is brought ready peeled from contractors who get it from the *tur* fields of the Konkan and Gujarat [Other woods have been tried at the factory but for small arms powder none produce such good charcoal as *tur* wood. *Sevri* or *Jointi*, Bombax malabaricum, wood which is much grown about Poona in gardens and sugarcane fields, is likely to be useful in making common powders.]

The monthly establishment charges of the factory amount to £540 (Rs. 5400). The daily hours of work are 6-30 A.M. to 2-30 P.M. and two hours more for the incorporating mills.

Gymkhana(73).

The present Poona GYMKHANA or sport club was formed in 1879 by the union of the Badminton, Lawn Tennis, Croquet, Polo, and Golf clubs with the old Gymkhana which had provided for cricket pigeon-shooting sky-races and sports. The union of these clubs was agreed to at a meeting held in 1879 under the presidency of Sir Richard Temple, then Governor. The managing body of the Gymkhana includes a President and nine members, the secretaries for Cricket, Tennis, Badminton, Pigeon-shooting, Golf, Polo, and Sky Races, a General Secretary and Treasurer, and two other members. The badminton and lawn tennis courts are in the open space to the south of the Council Hall. The tennis courts occupy the site of the old croquet grounds the last of which was turned into a lawn tennis court in 1881. The courts, of which there are seven, are formed of a layer of murum or crumbled trap over a layer of road metal the whole carefully levelled and kept in order by constant rolling and watering The badminton courts are in a thatched building near the southern or Lothian Road end of the same open space. Till 1881 the building was in the form of a cross of four equal limbs lying north, south, east, and west, each limb forming a badminton court and leaving a square space in the centre for on lookers. In 1881 a new court was formed by lengthening the northern limb, and the western limb was turned into dressing rooms. Cricket is played on the open ground to the east of the

Ordnance Lines. The cricket ground is a rectangular space of about 200 yards by 150 enclosed by posts and chains. At the middle of the west side is the pavilion including a central room with dressing rooms at the south end and the buffet, store room, and cookroom at the north end. The Gymkhana race course, of which the winning post was in front of the pavilion, has fallen into, disuse and Gymkhana races are now run on the regular Race Course (95). Pigeon-shooting is carried on in the open ground behind the Ordnance Lines about 300 yards north of the cricket pavilion. Polo is played on the ground bounded by the Rest Camp, the old Sapper's Lines, on the Koregaon road, and the Staunton road. The Golf course is partly over the Polo ground and partly on the ground to the east stretching to the Ghorpadi Barracks.

Objects. Gymnasium (74).

The GYMNASIUM, which is one of the finest in the Bombay Presidency, is between St. Andrew's church and the Soldiers' Institute about 450 yards east of St. Mary's church. It was built by Government in 1872 and was opened early in 1873. The building is eighty feet long by fifty-two wide and has two wings (50' by 30') one for a school of arms and the other a recruits' gymnastic drill room. It has also dressing rooms for officers and men and an office. The institution is solely for the use of soldiers and military officers. The staff includes, besides the Inspector of Gymnasiums in the Bombay Presidency, one serjeant-major as chief instructor, and two assistant instructors. All officers, noncommissioned officers, and men sent for instruction to the Poona Central Gymnasium have to pass a gymnastic course. The ordinary course lasts three months and a special gymnastic instructor's course lasts eight months. The chief appliances in the gymnasium are a horizontal bar, parallel bars, vaulting horse, vaulting bar, bridge ladder, rope ladder, inclined ladder, ladder plank, trapezium, shelf, octagon, prepared wall, mast, jumping stand, row of rings, pairs of rings, slanting poles, vertical poles, climbing ropes, vertical ropes and poles, horizontal beams, turning pole, elastic ladder, and dumb and bar bells. Every year about four officers and 700 non-commissioned officers and men are taught gymnastics, and ten officers and twenty non-commissioned officers and men are taught fencing. The voluntary yearly attendance averages thirty officers and 11,594 noncommissioned officers and men. Men attending the gymnasium are taught to swim in a swimming bath attached to the gymnasium.

Holkar's Bridge(75).

HOLKAR'S BRIDGE, 498 feet long by 16' 3" broad, spans the Mutha between Poona and Kirkee east of the Deccan College, 3.54 miles from the Poona post office. The bridge is carried by nineteen arches varying in span from 12' 8' to 22' 5'. The height of the roadway above the river bed is thirty-three feet. The side protections of the bridge are modern and consist of teak railings carried on corbets against the face of the spandrils of the arches to leave the full width of the bridge roadway clear for traffic. [Colonel Ducat, R. E,]

Holkar's Temple (76).

About sixty yards south-west of the south end of Holkar's Bridge, and 3.45 miles from the Poona post office, in an oblong enclosure (90' by 70'), is a temple raised to Vithoji Holkar and his wife who committed *sati* in his honour. It is now called the temple of Mahadev. It is an oblong courtyard enclosed by a nine feet wall with a shrine (15' by 15' by 10') at the south-west end of the courtyard. The shrine has the usual anteroom with side niches and a recess containing two *lings* surmounted by a cupola about nine feet high. In front of the shrine is a low stone platform with a small stone bull or Nandi and a slab carved with footprints. Other objects in the courtyard are a small basil stand, an *Egle* marmelos or *bel* tree, and in a corner the pedestals of the two *lings* which are in the shrine and originally stood on the Nandi platform. The temple was built by one of the Holkars, and is maintained by the present Holkar.

Jamsetji Bund (77).

The JAMSETJI BUND is a masonry dam across the Mula-Mutha about one and a half miles north of the post-office. Its length is 853 few and the width of its paved top 16½ feet. The lower side is vertical with a greatest height of 17 feet above the rocky bed of the river. In the centre of the dam are four sluices, consisting of arched openings in the masonry 6¹/₄' by 7¹/₂' with semicircular tops, closed by planked doors sliding vertically in grooves cut in the masonry. On the upstream side, except in front of the sluices, a paved slope, at one in twelve, stretches from the crest of the dam to the river bed. The object of this gentle slope appears to have been to prevent the lodgment of silt above the dam, an object more effectually gained by the use of sluice gates. The dam formed part of a system of works for supplying the cantonment with water, which was drawn from above the dam through a tower inlet and filter beds, whence it was pumped, originally by bullocks, and afterwards by steam, through iron pipes leading to the cantonment. These have now been superseded by the Khadakvasla water works. These water Works and the dam were completed in 1850 by Captain Studdert, R. E. at a cost of £25,750 (Rs. 2,57,500) of which £17,305 (Rs. 1,73,050) were contributed by Sir Jamsetji Jijibhai. Bart, after whom, the dam was named.

Jews' Graveyard (78).

Within suburban municipal limits, on the right bank of a small stream that runs north, about five hundred yards east of the Koregaon railway crossing, is a rectangular walled enclosure. A wall divides it inside into two unequal parts, the western half belonging to the Konkan Jews or Bene-Israels, and the eastern half to other Jews.

Near the Native Infantry Lines are some old tombs of Bene-Israel Jew soldiers and Native officers. The site has been long unused.

Kirkee Barracks (79).

The KIRKEE BARRACKS, 3.86 miles from the Poona post office, have been built at various times. The present main barracks are seven hand-some 'stone-built two-storeyed buildings, each with room for forty-six men. These barracks, with their cook-rooms

wash-rooms and out-houses, were built in 1870-71 at a cost of £114,353 (Rs. 11,43,530). In addition to these seven main barracks, three old single-storeyed barracks are used as a gymnasium, coffee shop, and reading and prayer rooms. A canteen was built in 1827 and a library in 1866-67. A hospital was built in 1830, containing six wards with beds for seventy-six male patients and a hospital for fourteen female patients. The Royal Artillery Riding School (154'x54') was built in 1849. These barracks have tile-roofed gun-sheds for three batteries, and stabling built between 1864 and 1871. The gun-sheds and stabling consist of two iron-roofed stables, each housing thirty-four horses, built in 1864-65; two iron roofed stables, each housing fifty horses, built in 1866-67; and four iron roofed stables, each housing sixty horses, built in 1870-71.

Kirkee Battle Field (80).

KIRKEE [This account is chiefly compiled from Grant Duff's Marathas, 634-635, 654; Pendhari and Maratha War Papers, 119-128; and Blacker's Maratba War Memoir 64 - 69. Since the account was written, Mr. Elphinstone's description of the battle with a map has been published in Sir T, E, Colebrooke's Life, I, 382-386.] PLAIN is famous for the defeat of the army of the last Peshwa Bajirav (1796 -1817) by a small body of British troops on the 5th of November 1817.

For more than a year the relations between the British Government and the Peshwa had been strained. In July 1816, the murder of Gangadhar Shastri, the Gaikwar's agent, when under British special protection, the favour shown by the Peshwa to Trimbakji Denglia, Gangadhar's murderer, the Peshwa's failure, in spite of ample means, to provide his contingent of troops, and his intrigues with Sindia, Holkar, the Raja of Nagpur, and the Pendharis, determined the Marquis of Hastings, then Governor General, to make such an agreement with the Peshwa as would prevent him from defeating the object of the treaty of Bassein (Dec. 31, 1802). In April 1817, before concluding any agreement, the Governor General insisted that the Peshwa should promise to give up Trimbakji Denglia. For weeks the Peshwa evaded the Resident's demand, till, on the 8th of May, Poona was surrounded by British troops. Then, under the influence of Moro Dikshit, one of his Brahman advisers, who strongly opposed a breach with the English, the Peshwa issued a proclamation offering a reward for the capture of Trimbakji Denglia, and, as a security for his good faith, handed to the British the hill-forts of Purandhar, Sinhgad, and Raygad. The new treaty was then considered, and, in June, after long discussion, the Peshwa agreed to the terms which had been drawn up by Mr. Elphinstone according to the Governor General's instructions. Under this treaty the Peshwa admitted that Trimbakji was Gangadhar's murderer, and promised to show him no favour and to do his best to have him seized and handed to the British. He engaged to have no dealings with any court except through the British Resident, and, instead of the contingent of troops which he had always failed to furnish, he undertook to make over to the British, lands yielding revenue enough to support a force of 5000 cavalry 3000 infantry and a due proportion of ordnance. This treaty, which is known as the treaty of Poona, was concluded on the 13th of June 1817, In accordance with the treaty, after a slight delay, the Peshwa's share of Gujarat, the North Konkan, the fort of Ahmadnagar, and the territories of Dharwar and Kushgal, were made over to the British, the strength of the Peshwa's cavalry was reduced,

and, except a battalion about 500 strong kept in the Peshwa's pay, the brigade which had been raised by the Peshwa in 1813 and drilled and officered by Englishmen was placed under British control and called the Poona Auxiliary Force. [This brigade was chiefly composed of men from the Company's districts in Hindustan. On entering the battalion the men took an oath of faithfulness to the Peshwa, but, of their own accord, they added the proviso, so long as the Peshwa continues in alliance with the British Government.] In July the Peshwa went on a pilgrimage to Pandharpur and from Pandharpur to Mahuli the sacred meeting of the Yenna and the Krishna near Satara. At Mahuli he was visited by Sir John Malcolm, the Governor General's Agent for the Deccan. The Peshwa complained of the harshness of the recent treaty. At the same time he professed so warm a regard for the British, and so fully admitted his dependence on British support, that Sir John Malcolm was satisfied that whatever his feeling might be, interest would force him to remain friendly. He advised the Peshwa to show his goodwill to the English by joining with them in putting down the Pendharis. Nothing, Bajirav declared, would give him more pleasure than to take part in this work, and, with this object, Sir John Malcolm allowed him to enlist fresh troops. Mr. Elphinstone had no faith in Bajirav's promises, and, by the help of two friends, Yashvantrav Ghorpade a Maratha, and Balajipant Natu a Brahman, was kept informed of Bajirav's plans. Bapu Gokhle was made chief minister and nearly a million sterling was given him to ensure the support of the Maratha chiefs and nobles. Bhils and Ramoshis were enlisted and special missions were sent to Nagpur and to the camps of Holkar and Sindia. On the 5th of September the Governor General, informed by Mr. Elphinstone of the Peshwa's designs, wrote to the Directors: 'We cannot rely on the fidelity of the Peshwa except when it is ensured by the immediate sense of our power. The persevering perfidy of his attempts, after the most solemn assurances of contrition for the past, and of scrupulous good faith for the future, forbid any reliance on him. [Pendhari and Maratha War Papers, 114, 115.]

On his return to Poona, at the end of September, the Peshwa continued to push on his preparations for war. His army 'was strengthened, his forts were repaired stored and garrisoned, and orders were issued to make ready his fleet. Of two parts of the scheme the Peshwa took personal charge, the Resident's murder and the bribery of the British troops. Gokhie opposed Mr. Elphinstone's murder and the attempt was put off till the arrival of Trimbakji Denglia and his Bhils. Great efforts were made to shake the loyalty of the British troops. The families of some whose homes were in Ratnagiri were seized and their destruction was threatened unless the men came over to the Peshwa. Large sums were spent in bribery. One native officer was offered £1000 (Rs. 10,000) and £5000 (Rs. 50,000) were advanced to an agent in the hope that he might corrupt some of the British officers. At their last meeting, on the 14th October, the Peshwa complained to Mr. Elphinstone of his loss of power. He still professed friendship for the British and promised to send his troops against the Pendharis as soon as the Dasara was over. On Dasara Day, 19th October, Bajirav held a great review. He treated the Resident with marked discourtesy, and during the review allowed a body of horse to dash down on the British force as if to attack it. After the Dasara, instead of sending his troops against the Pendharis, he kept increasing their strength by summoning fresh parties from all sides.

Mr. Elphinstone was satisfied that the Peshwa would attack him before many days were over. Messages were sent to hurry on the European regiment on its march from Bombay, and to General Smith, who was at Ahmadnagar, to keep a force ready at sirur Besides Mr. Elphinstone's escort of two companies of Bengal Native Infantry at the Residency and the Peshwa's battalion [The details were: about 500 infantry, a few cavalry, and three sixpounder guns.] of the poona Auxiliary Force under Major Ford at Dapuri, the British forces consisted of about 1200 men of the Sixth and Seventh Regiments of Native Infantry [The details were: second battalion I. Regt. N. I., second battalion VI. Regt. N. I., and first battalion VII. Regt. N. I.] and two guns under the command of Colonel Burr, who were camped at Garpir on the right bank of the Mutha river. This position, which is near the Collector's office close to the northern outskirts of Poona, had been chosen in 1803 by the Duke of Wellington to guard the town. It was well suited for guarding the town, but, with an unfriendly force in the city, the position was far from safe. Highhedged gardens coming close to the lines gave assailants an easy approach and the disaffected a safe escape. On the 25th and two following days bodies of horse camped round the British lines, a strong corps of Gosavis took a position on the Vanavdi uplands to the east, and the Vinchurkar's horse with some infantry and guns posted themselves to the west between the Residency and Bhamburda village. The Maratha commanders were eager for an immediate attack. On the night of the 28th their guns were yoked, their horses saddled, and their-infantry ready to advance. But the Peshwa wavered and the night passed in consultation. Next day (29th) Mr. Elphinstone sent to the Peshwa complaining that his troops were pressing on the British lines and asking him to order them to withdraw. The message caused great excitement. Gokhle was for instant attack. But again the Peshwa was undecided. The work of winning over the British troops was not yet completed and every day was adding to the Maratha strength. Another night passed in consultation and next afternoon. A forced march of about thirty miles brought the European regiment into the Garpir cantonment On the first of November, leaving a company to guard Garpir and 250 men to strengthen the Resident's escort, Colonel Burr's force, about 800 European Infantry and 1200 Native Infantry with six guns. [The details were: The Bombay European Regiment, two battalions I. Regiment N. I., two battalions VI. Regiment N. I., and one battalion VII. Regiment N. I. Of the six guns two were iron twelve-pounders, the four were apparently six-pounders. See Blacker's Maratha War Memoir, 64.] crossed the Mutha and marched three miles north to Kirkee. North of Poona, across the Mutha river, with the Bhamburda hills on the west and the Mula winding along the north and east, stretches a slightly rolling plain. Except a belt of arable land on the left bank of the Mutha and a fringe of watered and fenced gardens along the right bank of the Mula, the plain is bare and open. Beyond the end of the Bhamburda hills a low ridge stretching north-east rises slightly to the village of Kirkee, driving the Mula north in a deep bend that half surrounds the village. The camp was pitched in the low land to the east of the village, the left resting on Holkar's Bridge (75) and the right on the rise of Kirkee village, the site of the Powder Magazine. This rising ground commands the plain, which, With one or two slight dips and rises, falls south to the line of the Poona-Bombay road. Behind the road to the right stretch the Bamburda or Ganeshkhind hills, and, to the left, beyond the Mutha valley, rise the sharp temple-crowned peak of Parvati and the distant Sinhgad hills. About a mile and a half west of the Kirkee camp, on the left bank of the Mula, lay Dipuri, the head-quarters of Major Ford's battalion; about a mile to

the east was Holkar's Bridge; and nearly three miles to the south, long the right bank of the Mula, lay the Residency with a garrison of about 400 men. The straight road from Kirkee to the Residency passed along the right bank of the river, but there was a second path over Holkar's Bridge along the left bank of the Mula and across a ford just behind the Residency. On the first and second of November Colonel Burr prepared a post at Kirkee for his stores and munition and Mr. Elphinstone examined the ground near Kirkee, fixed a ford for the passage of the Dapuri guns, and impressed on the commanding officers that if matters came to a crisis, the two British detachments should march out, join, and attack the Marathas. The withdrawal of the British from Garpir to Kirkee greatly encouraged the Marathas. Garpir was plundered; Lieutenant Shaw, an officer of the Bombay army, on his way to Bombay was attacked, wounded, and robbed in open day by one of Bajirav's personal followers; the ministers spoke of the British with contempt, British officers were insulted, and Maratha troops pushed forward close to the Residency. Mr. Elphinstone warned the Peshwa that if they advanced further the Maratha troops would be treated as enemies, and ordered the light battalion and the auxiliary horse at Sirur to march into Poona. On hearing that the Sirur troops had been sent for, the Peshwa determined to wait no longer. He ordered the Residency to be destroyed and all the British killed except Dr. Coats, whose medical skill had once saved his life, and Major Ford, the commandant of the subsidiary force, if he agreed to stand neutral. Moro Dikshit, who was attached to Major Ford, visited him and tried to persuade him to remain neutral. But Major Ford refused to desert his countrymen and withdrew from Poona to his camp at Dapuri.

On the morning of the fifth, the din of preparation rose from the city, the Maratha troops drew closer to the Residency, and a battalion took ground between it and the company which had been left at Garpir. Mr. Elphinstone sent a message to the Peshwa calling on him to keep to his promise and lead his troops against the Pendharis. About two in the afternoon one Vithoji Naik Gaikwar came from the Peshwa. He told Mr. Elphinstone that his master had heard that the Resident had sent for reinforcements, that he feared that, as had happened in June, Poona would again be surrounded by British troops, and that if Mr. Elphinstone did not send away the European regiment, reduce the strength of the native brigade, and move the cantonment to a place to be named by him, the Peshwa would leave the city. Mr. Elphinstone replied that the Peshwa had no right to demand and that he had no power to order the British troops to be moved. Vithoji Naik complained and threatened and left warning Mr. Elphinstone that if he did not do as the Peshwa wished evil would come. As soon as Vithoji left Mr. Elphinstone called in the guard from Garpir, and sent Mr. Grant, afterwards Captain Grant Duff, along the ridge that stretches west to Bhamburda to watch what went on in Poona. Infantry were gathering on the slopes of the Bhamburda hills, and filling the space between the Recidency and Ganeshkhind, and south towards the city, where it was not covered with corn, the lowland was full of horsemen. On Vithoji's return Bajirav was seen to withdraw to Parvati. For an hour the city was still. Then, about three o'clock, in spite of the ill-omened breaking of the staff of the Golden Streamer, Bajirav, satisfied of Parvati's favour, gave the order to attack. The masses of troops in front of the town began to move, and with the trampling and neighing of horses, the rush of riders, and the rumble of gun-wheels, endless streams of horsemen poured from every outlet of the town. From the fields between the city and the

Residency, scared by the uproar, antelopes bounded away, husbandmen fled, and bullocks broke from their yokes and gallopped off. The moving wall of horsemen, with a roar like that of the Cambay tide, sweeping all before it, crushed the hedges and the standing corn, and, laying every barrier low, filled the valley from the river to the hills, To defend the Residency against such a host was hopeless. Messengers were sent to Colonel Burr at Kirkee and to Captain Ford at Dapuri directing them to move out, join their troops, and advance to meet the Marathas. Mr. Elphinstone and his escort of about 500 men forded the Mula behind the Residency, and, passing along the left bank of the river, crossed again by Holkar's bridge. They had hardly left the Residency when the Marathas dashed into the enclosure, tore up the trees, and setting fire to the buildings, burnt them to ashes, destroying Mr. Elphinstone's books and papers and everything he had except the clothes on his back.

At Kirkee, Colonel Burr, leaving his camp standing, and sending part of the second battalion of the Sixth Regiment and two twelve-pounder iron guns to guard the post at Kirkee, marched about a mile towards Poona. Here he was joined by the Resident with his guard. The Bombay European Regiment, the Resident's escort, and a detachment of the second battalion of the Sixth Regiment were placed in the centre, the first battalion of the Seventh Regiment with two guns on the left, and the second battalion of the First Regiment with two guns on the right. It was now about four o'clock, and after a short pause, as Major Ford's force was seen drawing near, Colonel Burr advanced to the attack.

The Marathas held a strong position about a mile and a half in front of the British. On the Maratha left the Vinchurkar's and Moropant's horse with the Golden Streamer held the base of the hill in front of Ganeshkhind, a line of infantry and fourteen guns filled the centre, and on their right towards the Residency lay a large body of infantry and cavalry, their front strengthened by a rivulet and walled gardens. Behind, back to the bank of the Mutha, the plain was full of horsemen line after line as far as the eye could see. As the British advanced, the fire of their right infantry caused much loss among the Maratha skirmishers and damped the Marathas' spirit as they had believed that the British sepoys would not fight. At Parvati the fainthearted Peshwa, seeing the ready advance of the British, lost courage, and sent word to Gokhle that he was not to fire the first gun. Gokhle, as he was riding up and down the tanks chiding and cheering his men, caught sight of the Peshwa's messenger, and, knowing what message he was likely to bring, opened a battery of nine guns, moved a strong corps of rocket camels to his right, and pushed forward heavy masses of cavalry, which, advancing at speed, swept over the plain nearly surrounding the small body of British troops. Major Ford was still about 1000 yards to the west of the British line, when Moro Dikshit and one of the Rastias, at the head of a large body of horse, eager to show that the Peshwa's suspicions of their loyalty were unfounded, charged Ford's battalion. Ford threw back his right wing, and, waiting till the enemy were close at hand, met them with so deadly a fire that, with the logs of their leader Moropant, they wheeled, to the left and passing on were finally scattered by the heavy iron guns posted at Kirkee. When Ford joined the main line two guns were moved from the right to the centre and the light company of the Seventh Regiment was sent to the rear to keep off the Maratha horse. Meanwhile, on the left, 3000 trained Arabs and Grosavis, under a Portuguese named De Pinto. [According to some accounts the

Portuguese tomb to the north of Garden Reach marks De Pinto's grave. This seems to be a mistake as De Pinto is mentioned (Pendhari and Maratha Wars, 129) after the battle of Kirkee as taking charge of Hunter and Morrison, two English cornets, who were captured by the Marathason the Bombay road. See below, Uruli.] passing from the centre of the Maratha line along the enclosures and watered land near the Mula, reached the open plain, apparently near the ruined water-channel behind Rose Hill house, and formed in front of the first battalion of the Seventh and the second battalion of the Sixth Regiments. At sight of their red coats and colours the English sepoys pushed forward, and, in their eagerness to close, broke from the line. Gokhle saw the disorder, and, raising the Golden Streamer, followed by several of his highest officers and a picked body of 6000 horse, charged from the right along the British line. Seeing the danger Colonel Burr took his post with the colours of the Seventh, a regiment he had formed and led for years, stopped the pursuit of De Pinto's battalion, and called on his men to keep their fire and show themselves worthy of his training. As he passed along the line Gokhle's horse was wounded and he was forced to retire. Other officers took his place and they were dashing into the broken British line, when, close in front, the foremost horses floundered in a deep morass, and rolling over disordered the ranks behind and offered an easy aim to the British fire.

About 300 horsemen struggled through the morass and attacked the British flank, but were forced to retire before some companies of Europeans who pushed on to support the Seventh Regiment. [The account in the text, perhaps, explains the apparent discrepancy between Grant Duff's 6000 Maratha horse (653) and Blacker's (Maratha War Memoir, 65) 300 resolute Marathas, Neither side knew of this morass, It was probably due to the very heavy late rains. Grant Duffs Marathas, 653.] As the British line advanced, the Maratha centre and left withdrew driving off their guns. The strong body of infantry on their right sheltered by the stream bed and garden enclosures, for a time galled the British left. But skirmishers were thrown forward and they were forced to give way. The English now held the Maratha position, and as night was falling and the enemy were broken and scattered, pursuit was stayed and the British troops returned, Colonel Burr's brigade to Kirkee and Major Ford's to Dapuri, reaching their camps about eight at night.

The British loss was eighty-six killed and wounded, fifty of whom Were sepoys and one, Lieutenant Falconer, a European officer. [The details are: Artillery, two laskars wounded; Bombay European Regiment, one private killed, one wounded; second battalion First European Regiment, one private killed, one Lieutenant (Falconer) died of his wounds, one *havaldar*, one *naik*, one waterman, five privates wounded; second battalion VI. Native Infantry, killed four privates, wounded ten privates; first battalion VII. Native Infantry, killed one havaldar, one *naik*, one drummer, nine privates; wounded one *havaldar*, three *naiks*, theirty-four privates. Major Ford's Battalion, killed one private; wounded one *jamadar*, one havaldar, five privates. Colonel Burr, Pendhari and Maratha War Papers, 125.] Of the Marathas 500, including the minister Moro Dikshit, were killed and wounded.

Two thousand eight hundred infantry, several of them disaffected and only 800 of them Europeans, broken into two bodies, almost without cavalry, and with only seven six-

pounder and two twelve pounder guns, in an open plain covered by the enemy's horse, had marched against and scattered and army of 20,000 cavalry and 8000 infantry armed with fourteen guns. [Besides this force, the Peshwa had 5000 horse and 2000 foot at Parvati. Grant Duff's Marathas, 654 note 1.]

Of the British troops the Marathas of Major Ford's subsidiary force deserted, and part of his newly raised horse were allowed to withdraw. But, of the regular sepoys, in spite of the Peshwa's bribes and threats, not one left the British colours. Colonel Burr, the commanding officer, though crippled' by paralysis, laid his plans with wise care and in the thickest of the fight remained firm and cool. [Two of Colonel Burr's attendants were shot by his side, a ball grazed his horse's head and another went through his hat. Grant Duffs Marathas, 653 note 2,] The victory was mainly due to Mr. Elphinstone who had secured the presence of the European regiment, freed the troops from the dangers of their former camp, planned the meeting of the two divisions of the force, insisted on an advance in spite of the openness of the plain and the doud of Maratha horse, and throughout the day inspirited the troops by his brilliant gallantry.

Kirkee Catholic Church(81).

Vincent de Paul's ROMAN CATHOLIC CHURCH building, 107' 6" long by 42' 3" broad, is 120 yards north-east of the Kirkee Artillery Mess and 362 miles from the Poona post office. It was originally a Protestant church.

Kirhee Christ Church(82).

CHRIST CHURCH in the Artillery Lines at Kirkee and 3.75 miles from the Poona post office is 150 feet from east to west and seventy-five feet broad at the chancel. It was consecrated by Bishop Carr in1841 and has seats for 600 persons. A brass is let into the floor in front of the west entrance and over it are two regimental colours. The brass bears the inscription: In commemoration of the past history of the 23rd Regiment, Bombay Native Light Infantry, the above colours, are, by permission, placed in this church, 1870.

In front of the reading desk is another handsome brass to the memory of Captain Arthur Carey, of the Royal Horse Artillery. The church has several handsome tablets erected by regiments to officers and men of their corps who died during service in India. There is a tablet to three officers of the Fourth Queen's Own Light Dragoons, who died in Sind in the Afghan campaign of 1838, and one to thirty officers of the 14th King's Light Dragoons, who died between 1841 and 1859, twenty-five of them killed in action. A third tablet is to ninety non-commissioned officers of the same regiments, who died or were killed during the same campaigns, three of them in action at Ramnagar in the North-West Provinces. There are two other tablets to officers of the same regiments.

Lakdi Bridge Lake Fife (83).

LAKDI BRIDGE. See above Bridges (pp. 284-285).

LAKE FIFE [Contributed by Mr. J. McL. Campbell, C. S.] can be most easily reached by the Poona and Sinhgad road. The dam, which is at the end of the lake nearest Poona, is about ten miles south-west of St. Mary's church (109). Between Parvati hill (90) and Khadakvasla village the road thrice crosses the Right Bank Canal. On nearing Khadakvasla the great masonry dam 3687 feet long and ninety-nine feet high, rises above the village and over a fine grove of young babhul trees in the old river bed. The lake itself does not show till the dam is almost reached, when the lowest stretch, about two miles long and three quarters of a mile broad, comes into view. From the first stretch the lake winds about eleven miles up the valley, nowhere broader than three quaters of a mile, like a broad river rather than a lake. In sailing up the lake, on the south, beyond a level belt of cropped land, stands the mass of Sinhgad, its lower teak-clad spurs and ravines rising into bare slopes with patches of hill tillage, crowned by the lofty wall-like scarp of the fort; to the west Torna tops the nearer ridges; and to the north bare slopes with a few stunted teak trees lead to the groups of rounded hills of which Bhanbava is the centre. The banks of the lake are bare. No weeds or reeds fringe the margin, and, except a patch of mangoes and babhuls on the south bank near the dam, the upper slopes are treeless. Following the windings of the lake, about eight miles from the dam, the village of Sangrun and a large banian tree mark the spot where the Mutha from the north joins the lake almost at right angles. When the lake is full an arm stretches about three quarters of a mile up the Mutha, and the main body passes up the Musa valley narrowing and winding between steep lofty banks. Four miles beyond Sangrun, at the village of Kuran, on the north bank of the lake, is the meeting of two streams both of which bear the name of Musa. When full the lake passes a little more than a mile up the northern Musa and a mile up the southern Musa. Both of these branches are very narrow as, at its greatest height, the lake does little more than fill the river beds. About the end of May, when the lake is at its lowest, its water does not pass up the Mutha and not more than a mile and a half up the Musa beyond Sangrun. From singhad even when it is full Lake Fife makes little show. The broad lower reach near the dam is seen, but many of the upper windings are hidden by spurs of the hill and by the high banks of the lake. Except a few watercourses and spits of soft soil, the hard bare banks of Lake Fife offer neither food nor cover for birds. There are no weeds rashes or other water plants, no islands, and no partsunk trees and bushes, only a broad unbroken expanse of deep blue water washing a clean, bare, and hard shore.

Such [Contributed by Mr. H, Wenden, C. E.] a lake can have no large number either of resident or of migrant birds. During the hot season, until the end of September, hours may be spent on the lake without seeing a dozen different kinds of birds, and even during the cold weather, when the number of kinds greatly increases, considering the vast sheet of water and the wide range of bank, the number of birds on or by the lake is very small. The few moderately large flights of coots duck, and teal that, at suitable seasons, appear on the lake seem to resort to it only as a safe midday resting place when they cannot remain andisturbed in the neighbouring watercourses and other feeding grounds. Fifty-five kinds of birds have been noted: The Bald Coot *Fulica atra*, the Blackbacked Goose *Sarkidiornis melanonotus*, the Whistling Teal *Dendrocygna javanica*, the Ruddy Shieldrake *Casarca rutila*, the Shoveller *Spatula clypeata*, the Spottedbilled Duck *Anas pacilorhyncha* the Gadwall *Chaulelasmus streperus*, the pintail Duck *Dafila acuta*, the

Wigeon Mareca penelope, the common Teal Querquedula crecca, the Bluewinged Teal Querquedula circia, the Redheaded Pochard Fuligula ferina, and the Tufted Duck Fuligula cristata. Occasionally on a muddy spit or bank may be seen a small group of Flamingos *Phoenicopterus roscus*, some Spoonbills *platalea leucorodia* making a short halt in their migration, some Pelican Ibis Tantalus leucocephalus, and Shell Ibis Anastomus oscitans. The mournful whistle or the sight of the Curlew Numenius lineatus is rare, and, though so numerous by other Deccan lakes, the Demoi-selle Crane kalam or Anthropoides virgo is only occasionally seen. The Black and the White Storks Ciconia nigra and C. alba are rare visitants. The Night Heron Nycticorax griscus is not common. The Whitenecked Stork Melanopelargus episeopus, the Blue Heron Ardea cinerea, the Large the Smaller and the Little Egrets Herodias torra H. intermedia and H. garzetta, the Cattle Egret Bubulcus coromandus, the Pond Heron Ardeola grayii, the Small Swallow Plover Glareola lactea, the Indian Ringed Plover Egialitis curonicus, the Redwattled Lapwing Lobivanellus indicus, the Yellowwattled Lapwing Lobipluvia malabarica, the Little Stint *Tringa minuta*, the Spotted Sandpiper the Green Sandpiper and the Common Sandpiper, Actitis glareola A. ochrophus and A. hypoleucus, the Greenshanks and the Little Greenshanks *Totanus glottis* and *T. stagnatilis*, and the Stilt *Himantopus candidus* are all fairly common. Here and there may be seen clusters of the Little Cormorant Phalacrocorax pygmaeus, and more rarely the Little Grebe Podiceps minor and the Indian snake-bird *Plotus melanogaster*. Three specks of Kingfishers *Halcyon smyrnonsis*, Alcedobengalensis, and Ceryle rudis, are fairly common, as are the Small Marsh Tern Hydrochelidon hybrida, and the Black-bellied Tern Sterna melanogastra. The Gullbilled Tern Gelocheli- don angliea is less common. Of Snipe, the shores of the lake have practically none but a very few of four species, the Pintailed the Common and the Jack Gallinago sthenura, G. gallinaria, and G. gallinula, and the Painted Snipe Rhynchoea bengalensis, together with a few specimens of the Pheasant-tailed Jacana Hydrophasianus chirurgus, the Water Hen Gallinula chloropus, and the White-breasted Water Hen Erythra phoenicura, frequent the reedy patch of marsh and pool which lies close below the great dam. Close below the dam, in the early morning and evening when they are in flight to and from their feeding grounds a few duck and teal, and, by beating, a few snipe may be shot. At several points along the canal between the Lake and Parvati are marshy patches which occasionally hold snipe and teal. Still on the whole, even with the and of a boat on the lake, little sport can be had at Lake Fife.

Of the eighty-six kinds of shore and water birds which are known to frequent the Deccan these fifty-five have been noted at Lake Life. The list is not exhaustive as the locality has not been closely studied The knowledge of the lake is also incomplete.

Twenty-one species of fish have been taken and noted. These are Ambassis nama *gandechiri*, Gobius giuris *kharpa*, Mastacembelus armatus *vambat* or *bam*, Ophiocephalus striatus *dakhu*, Ophiocephalus leucopunctatus *maral*, Macrones seenghala and M. cavasius *singhhala* or *shengal* and *shingti* or *shingata*, Rita pavimentata *ghogra*, Pseudentropius taakree *vaidi* or *vayadi*, Callichrous bimaculatus *gugli*, Wallago attu *shivada* or *pari*, Discognathus lamta *malavya*, Cirrhina fulungee *loli*, Rasbora daniconius *danalan*, Barbus sarana *kudali* or *pitule*, Barbus nexastichus *khadchi*, Barbus malabaricus *kavla*, Barbus kolus *kulis* or *kholashi*, Barbus ambassis *bhondgi*, Rohtee vigorsii *phek*,

Lepidocephalichthy thermalis *chikani*, Nemacheilus savona *mura*, Notopterus kapirat *chalat* or *chambaree*.[Some of these identifications are doubtful. Mr. H. Wenden, C. E.]

Of these twenty-one species the writer has taken only two with rod and line, the *pari* Wallago attu up to nineteen pounds in weight and the fish he supposes to be Barbus malabaricus up to twelve pounds. The best way of fishing is trolling from a boat with spoon or natural bait on what is known as the Thames snaptackle, with at least forty yards of line out and with a sinker between the trace and running line. The great secret is to fish deep. The boat on the lake can usually be secured through the courtesy of the Executive Engineer for irrigation and men to row it can be hired from the village of Khadakvasla.

Military Accounts Offices (84).

The MILITARY ACCOUNTS OFFICES, a large two-storeyed stone building, is in suburban municipal limits about 650 yards south-east of the railway station. The original main block of this building was built by a Mr. Mervanji Jamsetji for a hotel, but in 1835, before it was finished, on the recommendation of a committee, it was bought for Government for £35,000 (Rs. 3,50,000). It stands on the Government books at a value of £43,129 18s. (Rs. 4,31,299). In this building are the offices of the Controller of Military Accounts, the Military Accountant and Compiler, the Examiner pay Department, the Examiner Ordnance Department, the Examiner Medical Department, the Examiner Commissariat Accounts, the Judge Advocate General, the Commissary General, and the Military Fund Office.

Objects Military Prison (85).

The MILITARY PRISON is the Central Military Prison of the Bombay Presidency for offenders among the European troops. It is a group of substantial masonry buildings along a rocky ridge to the south of the cantonment and near the Vanavdi Barracks. Except the warders' quarters all the buildings are within an enclosure 700 by 1125' surrounded by a fourteen feet masonry wall. The prison has room for fifty prisoners in two blocks, each of twenty-five solitary cells. Two more blocks, each with twenty-five cells, were built in 1881. The ventilation and sanitary arrangements are on the most approved modern principles. Besides the four blocks, with twenty-five cells in each, the prison buildings include a cookhouse, a work-shed, a chapel library and school, a hospital with outhouses, apothecary's quarters, a guard-house, and a lavatory with a detached block of eight quarters for warders. The prison was built by Colonel A. U. H. Finch, R. E. Executive Engineer Poona, and designed, by him chiefly from standard plans. It was completed in 1876, and with the additions has cost £17,682 (Rs. 1,76,820).

Musalman Graveyard (86).

Details of the MUSALMAN GRAVEYARD to the south of the Collector's office are given above under Grarpir the Quartz Saint (68).

Napier Hotel.

The NAPIER HOTEL on Arsenal Road built in 1868 is now the property of a Joint Stock Limited Liability Company. It is an upper-storeyed building in four blocks with large porches and a garden over 300 yards long with four fountains. The roof is flat and the tops of the walls are cut in the form of battlements. The hotel has room for fifty-five to sixty visitors with a drawing room (42'x30'), dining room (20'x50'), billiard room (36'x16'), and forty-five bed rooms some of them double rooms for families, including a sitting room, a bed room (18' x 16'), two bath rooms, and a dressing room. It is also provided with large stables.

New Jhansi Barracks (88).

The NEW JHANSI BARRACKS in Kirkee, 3.27 miles from the Poona post office, consist of sixteen blocks each with room for twenty-four men. Besides the barracks the buildings contain quarters for a sergeant-major, conductor, schoolmaster, and quartermaster sergeant, married men's quarters for twelve, a school-room, a quarter-guard store-room and lock-up, work-shop, pontoon shed, armourer's shop, solitary cells, and latrines. Attached to the barracks is a hospital with eight out-houses.

PanchaleshvarTemple(89).

Beyond the College of Science, about 400 yards south-east, where the Ganeshkhind road crosses the railway, 1.95 miles from the Poona post-office, is a knoll topped with trees and white Musalman buildings. At the north foot of this rising ground a path to the right leads down a cutting between side walls of rock, six to eight feet high, into a rectangular enclosure which has been cut out of the rock. In the centre of the enclosure, part of the rock about twelve feet high has been left, and hewn into a circular porch or pavilion with a bull in the centre. Four massive square central pillars support the roof. But several of an outer circle of pillars with parts of the roof have fallen. From the porch a short passage leads to a rock-hewn temple of Mahadev. It is a large hall with little ornament and several rows of large square pillars. In a shrine opposite the door is a *ling* which is known as PANCHALESHVAR. The walls and the pillars are covered with modern paintings of the Pandavs and of some of the wonders worked by Mahadev. When visited in 1882 the temple was inhabited by a band of Gosavis or Bairagis who had made several small modern shrines and prevented the details of the cave being examined.

Parvati Hill (90)

PARVATI HILL, 3.23 miles from the Poona post office, is the bold temple-topped rock which, with bare stony sides rises 2111 feet above mean sea level or 261 feet above the city between it and the lofty line of the Sinhgad hills. It is about 500 yards south of the city limits and by the Sinhgad road 3.23 miles south-west of the post office. Up the cast face of the hill runs a broad paved stairway with steps about a foot high and two or three feet wide and on the left a wooden rail. At the foot are two small stone monuments, one a pillar about a foot high and two feet round called Nagoba or Father Cobra. At the top of the pillar a circle of hooded snake-heads surrounds a central cobra whose head has been broken off. The other monument, a square stone pillar about four feet high, raised to mark

a Sadhu or holy-man's grave, has its eastern face ornamented with the image of a man on horseback. About halfway up the hill a little altar on the left with several foot-prints carved near it, marks the spot of the last widow-burning in Poona. According to the Brahmans of the hill this sacrifice took place in 1832. The woman's name was Parvati and her husband was Madhavrav one of the temple Brahmans. At the top of the paved stairway the north-east crest of the hill is crowned by a high building, the under part of cut-stone, and the two upper storeys of plain brick. The southern crest of the hill is crowned by a long line of roofless square-windowed buildings three storeys high, the ruins of a palace which was begun by the last Peshwa Bajirav (1796-1817). It was never finished and the completed parts were destroyed by lightning, it is said, in 1816 the year before the battle of Kirkee (5th November 1817).

On entering the main temple, on the north-east corner of the hill, to the right is a twostoreyed brick building, the ground floor with plain square teak pillars used as a resthouse and the upper floor as a drum-room or nagarkhana. The gate on the left opens on an eight-sided courtyard surrounded by a brick and cement wall about sixteen feet high. In this wall are a row of rest rooms, large niches or open chambers about four feet deep and eight long with pointed arched ceilings. On the top of the wall, with a broad parapet on the east and west sides, runs a passage with an outer battlemented wall about four feet high provided with loopholes. In the centre of the enclosure is the chief temple of Shiv, a rather handsome building in the ordinary modern Hindu style with a spire and gilt top, on a plinth about a foot above the general level. At each corner of the plinth is a small domed shrine, to the Sun in the south-east, to Ganesh in the south-west, to Parvati or Devi in the north-west, and to Vishnu in the north-east Under a stone canopy between the temple and the east entrance gate sits a large black bull. In a separate enclosure to the west of the main temple is a smaller temple to Kartik Svami. To the south is a third temple to Vishnu. All three are in much the same style, in no way different from ordinary modern Hindu temple architecture. Round the southern and south-west crest of the hill are the remains of Peshwa Bajirav's palace which seems to have been planned to surround the crest of the southern half of the bill with a circle of buildings, three storeys high and one room deep. The palace was never completed and what was finished was destroyed by lightning. The north face of the chief temple wall, from which it is said Bajirav watched the battle of Kirkee (5th November 1817), commands a complete view of Poona and its neighbourhood. [To follow the battle Bajirav mast have used a telescope. Perhaps he used the very telescope presented to him from the East India Company by Lord Valentia in 1803, See Valentia's Travels, II. 128.] To the north, beyond the bare rocky slopes of Parvati hill, dark-green clusters of mango trees and golden-green patches of sugarcane are broken by house roofs and the gray stone towers of Garden Reach. To the north-west are the trees and houses of Bhamburda and further off the bare Ganeshkhind upland. To the north wind the tree-fringed banks of the Mutha and the Mula, and, from the woody Kirkee plain beyond, stand out the English and the Catholic churches, the Artillery Barracks, and the Powder Works. Beyond Kirkee stretches a bare plain with broken irregular hills the chief peaks being Khandeshvar in Khed and the flattopped range of Chaskaman. Towards the north-east, behind Parvati lake with its rich mangoes and cocoa-palms, rows of roofs stretch, thick and brown, shaded by trees, and here and there broken by high house-tops and white Hindu spires. The railway and

Wellesley bridges span the Mutha, and across the Mula stands the Deccan College, and still further, on the border of the bare plain, the Yeravda jail. To the east, beyond thick house roofs, from among the trees of the Civil Lines and Cantonment, rise the towers of the Sassoon Hospital and the Council Hall, the red tower and spire of the Synagogue, the gray belfry of St. Paul's and the Arsenal water tower, and the white spires of St. Mary's and St. Patrick's churches. To the east, along the line of the Mutha canal, beyond rich orchards and sugarcane fields, a bare stony belt leads to the high ground on which stand the Vanavdi European Infantry Barracks and the Military Prison. To the south-east and south the woods in the foreground are thinner and more stunted and the land rises in a bare low ridge on which, among a few trees, stand the Parsi Towers of Silence. To the south, the ground, without houses and thinly wooded, rises to bare uplands, and behind the uplands stretches the long range of the Sinhgad-Bhuleshvar hills ending westwards in the bold scarp of Sinhgad fort. To the south-west, green with tillage and timber, lies the valley of the Mutha with the waters of Lake Fife brightening the distance. Behind the lake stands the lofty crest of form and to the west the bare Bhamburda hills rise to the central peak of Bhanbava.

Close to the north of Parvati hill, between the foot of the hill and the bank of the Khadakvasla canal, on the northern outskirts of Parvati village is one of the circles of rude stones which, over most of the Bombay Deccan, are set up in honour of Vetal, the Ghost King or Demon Lord. A rectangular space, about thirteen yards broad by sixteen long, is marked by a ring of undressed stones most of them roughly conical. They vary in height from about six inches to a foot and are three to four feet apart. All are coated with whitewash and tipped with redlead. In the middle is a rough plinth about twelve feet square and two feet high, and in the middle of the plinth are two undressed stones about two feet high and between two and three feet round. The central stones are Vetal and Mhasoba who is properly the brother of Vetal, though the Parvati people seem to consider them the same. The outside ring of stones are Vetal's guards or sepoys. Twice a month, on the full-moon day and on the no-moon day, the village Mhar paints the stones with whitewash and tips them with redlead. On Friday evening a Teli or oilman comes and offers flowers betel-leaves and a cocoanut. No animal is sacrificed except an occasional goat in fulfilment of a vow. The stone dwellings for Vetal and this circle of guards are said to have been put up by the Mhars when Parvati village was founded. [This circle of Vetal stenes does not differ from the Vetal circles found near many Deccan villages. The circles are generally outside of the village and near the houses of one of the early or depressed classes, the Mhars or the Ramoshis. This Poona circle has the interest that it has been figured in Colonel Forbes Leslie's Early Races of Scotland, who suggests a connection between these circles and the stone circles found in England, Western Europe, and other parts of the world. Though they seem to have no direct connection it may be suggested that the original object both of Indian and of English stone circles, as well as of the Buddhist rail round burial mounds, is the same, namely to keep off evil, that is evil spirits, from the central stone or mound. A guardian circle is equally wanted whether the object to be guarded is a stone in which a spirit or god lives, a tomb in which the relics (and the spirit) of the dead remain, or a stone of judgment or an altar stone both of which probably in most cases were also Bethel's or guardian's houses. That during his crowning, when he is especially open to the attacks of the evil eye and

other evil influences, the king sits on the holy or guardian-possessed Scone stone suggests that the origin of the old British judgment stones may have been guardianpossessed seats for the elders of the tribe. In this connection the value of the Vetal circle is that it keeps fresh the early guardian idea. The centre stone is the god's house; the stones in the circle are the houses of the god's watchmen. Apparently Vetal's guards have no names. The only one of Vetal's guards who is known by name in the Deccan is Bhangya Bava. Whenever offerings are made to Vetal in fulfilment of a vow a chilim or hubble-bubble filled with hemp is offered to Bhangya Bava who takes his name from bhang or hemp-water of which he is said to be very fond. The other guards seem to be chosen by chance out of the hosts of bhuts and pishachs, that is ghosts and spirits of whom Vetal is the lord and leader. The fact that Vetal is shown holding a cane, Vet or bet, as a sceptre, and that sometimes a cane, which is the exorcist's great spirit-scarer or bhut-lord, stands for Vetal, suggest a connection between the words vet and Vetal. Twice a month at midnight on the full-moon and on the no-moon, like the Furious Host of early Europe (compare Stallybrass in Grimm's Teutonic Mythology, 918-950), Vetal, followed by crowds of spirits each with a torch in one hand and a weapon in the other, passes in ghostly state, clad in silver and gold, with richly trapped elephants horses and litters. Lucky is the man who sees the host, though he generally falls in a swoon, and still luckier the man who, trusting to some spell, walks to the god's litter and asks his favour. Vetal is human in shape, a man of a fierce and cruel countenance. He wears a green dress and holds a cane in his right hand and a conch shell in his left. He also holds in his hands a rosary of twenty-one beads of the *rudraksh* Eleocarpus lanceolatus, a piece of burnt cowdung, and some flowers of the rui Calotropis gigantea, a bush which he usually fastens to his right wrist and of which like the monkey god Hanuman he is very fond. Vetal dislikes women and never possesses them. A man whom Vetal possesses is held lucky and his advice is sought in all troubles. Though, as has been coticed above (p. 348) in the account of Vetal's temple in Vetal ward, some Vetals rise to a good social position and are worshipped by Hindus of all classes high class Hindus, as a rule, hold the ordinary Vetal worship discreditable, and except stealthily, seldom perform it. The lower orders believe in Vetil, worship him and pay him vows. His devotees are mainly of two classes sorcerers and at hltes Vetal is the sorcerers' god, because sorcerers wish him to give them some of his power over spirits; he is the athlete's god apparently because of the strength and activity shown by a man into whom Vetal has entered.

That both in the Deccan and in the Konkan special offerings are made to vetal by his votaries on the *Mahashivratra* Day, that is the big day of the god Shiv; that Vetal like Maruti, whom Hindus admit to be an incarnation of Shiv or Mahadev is specially fond of rut Calotropis gigantea flowers; that like Mahadev he is fond of *bhasm* or ashes and of the *rudraksh* or beads of the Eleocarpus lanceolatus; that like Mahadev he is the king of spirits; and the belief of some Konkan votaries of vetalthat be is an incarnation of Mahadev suggest that Vetal is an early form of Mahadev or the great god.

Intermediate between Vetal and Mahadev, higher in phase than Vetal and lower than Mahadev, comes Ganpati or Ganesh, who, as his name shows, like Vetal and like Mahadev, is the lord of spirits. Though the ideas that surround Vetal and Ganpati fare ruder and earlier than those of which Mahadev is the centre, it is worthy of note that, like

all the gods of modern Brahmanism, all three phases have risen from the early destructive to the more modern guardian stage. In his character of guardian, to each phase of the Ghost Lord, one of the chief healers or spirit-scarers has been added, the cane to Vetal, the elephant to Ganesh, and the *ling* to Mahadev.]

In the Konkan, where his worship is more general among the middle-classes than in the Deccan, Vetal's great day is *Mahashivratra* in February; in the Deccan special offerings are made on that day also, but his chief times appear to be *Holi* in March - April and *Dasara* in September - October. At these times Vetal's stone is whitewashed and tipped with redlead, and flowers, sandal paste, milk, butter, cakes, and occasionally flesh are laid before him. The offerings generally go to a Mhar or Mang who sits in the circle.

A few paces to the south-east of Vetal and his guard is a round stone and cement block of rough masonry about three feet high and six feet across with a stone in the centre like a *ling*. To this central stone, during the time of the Peshwas (1714-1817), tigers used to be tied and be baited by elephants. The pillar is now worshipped as Vaghoba or Father Tiger.

Parvati Lake (91)

Parvati Lake, nearly rectangular in form about 550 yards long by 225 yards broad and covering an area of about twenty-five acres, lies about half a mile north-east of Parvati Hill and to the south of the city. The lake is a beautiful piece of water fringed with rich gardens and stately trees and with a woody island in the centre. The cost of making the lake and building the dam is said to have been £1357 (Rs. 13,570). The idea of making Parvati lake seems to have occurred after the building of the Katraj aqueduct which passes through and along the east of the lake. The stormwater overflow from the aqueduct used to drain into the Ambil Odha stream, which passed through the present lake and the waste of so much good water perhaps originated the Parvati lake project. The bed of the stream was dammed with masonry above and below the lake, and the intercepting channel below the lower dam was again dammed in three places to form smaller pools below. These smaller pools remain but are out of repair The lake is still filled during the rains from the overflow of the Katraj aqueduct. Sluices, which are still worked, have also been made in the head dam to take the water of the Ambil Odha stream. The lake was a pleasing addition to the Hirabag or Diamond Garden where Balaji the third Peshwa (1740-1761) built a pleasure house. A neat flight of steps with intercepting paved landings lead from the pleasure house to the margin of the lake. The lake was begun in 1753 by Balaji (1740-1761) the third Peshwa. One day, according to the local story, when on his way to Parvati temple, Balaji, who was the most energetic of the Peshwas, looked at the works, and, enraged at their slow progress, got down from his elephant and began to pile the stones with his own hands. His retinue and officers followed his example and the dam was soon made. A piece of raised ground left in the centre to form an island was afterwards turned into a garden called the Sarasbag. A small temple of Ganpati was built some time after. Ganpati's minstrant has a monthly allowance of £1 10s. (Rs. 15) from the Parvati temple revenues.

Photozincographic Office (93).

The Photozincographic Office or Government Map office is within suburban municipal limits about fifty yards to the west of the post office. It fills a number of detached buildings some of them as old as 1831 and some built in 1868 and changed and improved in 1882. The buildings include an office (93' X 43'), a furniture store (33' x 17') a printing press house (45'x 23'), a draftsman's office (55'x 17'), two dwelling-houses, a room (75'X 16'), a store room (32'X 16'), and a new main press house (89' x 30').

Poona Hotel(93).

The Poona Hotel, within suburban municipal limits, at the corner of the Lothian and Bund Gardens roads, is about a hundred yards east of the post office and St. Paul's church. The hotel, which belongs to Messrs. Sorabji Jahangir and Sons, was opened on the 24th of May x873 with eight bed rooms. It has now (1884) a large dining room (40' by 22'), a large drawing room (35' by 22'), twenty servants' rooms, and stabling for fifteen horses and eight carriages. The hotel has thirty bed rooms, twelve for families in a detached upper-storeyed building open to the westerly breeze and eighteen for single visitors. The hotel terms are £10 (Rs. 100) a month and 10s. (Rs. 5) a day.

Post Of (94).

The Post Office in suburban municipal limits, nearly half a mile south-east of the railway station, is an unpretending substantial structure designed and built in 1873-74 by Colonel Finch, R. E. at a cost of £1971 (Rs. 19,710). The post office includes three rooms (50' by 20'), (57' by 20'), and (16' by 20'), and quarters for the postmaster.

Race Course(95).

The Poona RACE COURSE, an oval 1½ miles and 31 yards in circuit, encircles the General Parade-ground, near the centre of the belt of open land that runs down the cantonment from north to south. The course lies between the Native Infantry lines in the west and the Soldiers' Gardens in the east, and its southern end passes close to the Sholapur road. It is a right-handed course with a straight run in of about a quarter of a mile from south to north, the finish with the Grand Stand and small Stewards Stand opposite being near the north-west corner. The open ground in the centre is used for general parades when all the troops of the garrison are called out on field days. The whole ground slopes from west to east. The Grand Stand in the high ground to the west is admirably placed commanding every yard of the course from start to finish. As the present building is of no use except as a place from which to view the racing it is under consideration to build a new stand with coffee, refreshment, dressing, and other rooms. The course has been in use for nearly thirty years. It has lately been widened and much improved by Colonel Burnett and is in excellent order. Since last year (1883) water has been laid on all round by pipes from the Khadakvasla canal. About one-third of the width at the outer side of the course is regularly used for training all the year round. The rest is closed by ropes, and watered when necessary so as to raise a good turf by the time of the

Race meeting (which always takes place in the month of September) to which horses come from all parts of India. The races are run on alternate days and the meeting lasts ten days to a fortnight. As till lately there were no professional book-makers in India, it was the custom to hold lotteries in the evening before each day's racing. For the last two are professional bookmakers from England have attended the Poona and other large meetings in India, and as a good business is done it is probable that the number of professional bookmakers will increase. The Poona meeting is very popular and the entries for the Arab races are always large. The two principal races are the Derby, for which in the last two years (1882-1883) the entries have been thirty-live and fifty-one and the Governor's Cup for which the entries have been fifty-two and sixty-siven. The races are run under the Western India Turf Club rules.

Railway Bridge (96).

About 250 yards above its meeting with the Mula the Mutha is crossed by the Peninsula railway. The railway bridge, which is about 150 yards above the Wellesley bridge and is parallel to it, is 752 feet long and is of twenty-one thirty-feet span masonry arches. It is built of rubble masonry with coursed face work in the abutments piers and wings, and with brick work in the arches with stone ashlar arch quoins at the faces. [Captain Benson's Compendium, 3.]

Railway Station(97).

The RAILWAY STATION, half a mile north-west of the cantonment and 950 yards north of the post-office is one of the most important on the Great Indian Peninsula Railway line. The masonry buildings of the station comprise a station master's office, two waiting rooms, a telegraph office with fourteen signallers, a booking office, and a large third class waiting room. There are thirteen traffic and locomotive lines, ten of them sidings measuring 2\(^3\)4 miles and three lines one the main line, another the platform line, and the third an alongside line. There are three platforms, the passenger platform 595' long 20' broad and 2½' high, the horse-loading platform 307' long 20' broad and 3' high, and the goods, platform 605' long and 3¹/3' high with a varying breadth of 20' for 102 feet and of 47' for the remaining 503. The station yard with a greatest length of 845 yards and a greatest breadth of 155 yards covers an area of 93,651 square yards and is closed by a masonry wall. The yard has four gates to the east, two main entrances each 131/2 wide and on either side of these two small gates each 5' 2" wide, and on the south one main entrance 21 feet wide with two small gates each 5' 2" wide on either side of it. The station has four sheds, an engine shed, a goods shed, a carriage shed, and a store shed. The engine shed, 100 feet long 39 feet broad and 18 feet high, opens on the west and east. It is built of wrought-iron sides with corrugated iron covering and roof of wrought iron trusses and corrugated iron covering. The gables are of brick-work. The goods shed, 300 feet long 25 feet broad and 12½ feet high, opens on the north side to the railways. It is built of teak posts and has a teak roof with double tile covering. The south side and two ends are enclosed with palisade fencing and teak boarding with gateways at every alternate bay. The carriage shed, 200 feet long 39½ feet broad and 15¼ feet high, with its east and west ends open, is connected with the main line by rails. It is built of rubble masonry, teak

roof, and corrugated iron covering. The store shed, 200 feet long 25 feet broad and 16¼ feet high, opening at both ends, is connected with the main line by rails and with the outside by road. It is built of rubble masonry with double-tiled teak roof. [Benson's Compendium, 5-7.]

Royal Family *Hotel*(98).

The ROYAL FAMILY HOTEL is in the Civil Lines near the railway station. The hotel was started in 1861 by the present Parsi proprietor. It is an upper-storeyed building with room for five families and fourteen single visitors, and has stabling for sixteen horses and four carriages, and out-houses. The hotel has a drawing room (26' by 22'), a dining room (38' by 22'), a smoking room (22' by 13'), a billiard room (30' by 20'), and a hall (40' by 22'). The charges are 10s. (Rs. 5) a day and £12 (Rs. 120) a month.

Sangam(99).

The SANGAM or Junction at the meeting of the Mutha and Mula rivers, about a mile west of the post office, a pleasant house on the high river bank in a garden with fine old *pipal* trees, is the residence of the Judge of Poona who is also Agent for the Deccan Sardars. The Sessions Court-house is across the Ganeshkhind road about seventy yards to the south.

Santa Cruz (100).

On the right hand side going from Poona to Kirkee, on the bank of the small stream that runs into the Mula river at the north end of Garden Reach, in a small space surrounded by an open bamboo trellis fence about three feet high, are two plain whitewashed stone tombs. The larger tomb rises in pyramid form with five steps each about nine inches high from a square about six feet at the base to eighteen inches at the top, the whole surmounted by a plain stone cross about two feet high. There is another small cross at the foot and in the middle of the face of each step a small niche for an oil lamp. The smaller tomb is plain, altar-shaped, and about five feet long. It has a cross at the head and on the ground is a small stone slab with a cross cut in it. The crosses on the tombs are often hung with garlands of marigolds and chrysanthemums. The tombs are believed to mark the graves of Portuguese officers in the Peshwa's army who were slain in the battle of Kirkee (5th November 1817), but no certain information has boon obtained.

Sassoon Hospital (101),

The SASSOON HOSPITAL within suburban municipal limits, about 450 yards south of the railway station, is one of the largest and hand somest buildings in or near Poona. It was begun on the 8th of October 1863 and opened on the 7th of October 1867. It was built at a cost of £31,006 (Rs. 3,10,060) of which £18,800 (Rs. 1,88,000) were contributed by the late Mr. David Sassoon, a wealthy merchent of Bombay. The building was designed by Colonel Wilkins, R.E. and the foundation stone was laid by the late Sir Bartle Frere, then Governor of Bombay. It is in the English-Gothic style, built of the local

gray trap, rectangular in plan, 227 feet long by 50 feet wide, its longer sides facing east and west. It is double-storeyed, the rooms having windows on both sides opening into arcades, so as to afford through ventilation and shade. On the ground floor, in the northern half of the building, are two male wards, one 47½ feet by 23½ the other 71½ X 23½, and in the southern half is a dispensary 22′ x 234′ and two male wards 47½ by 23½. On the first floors are rooms of the same size as those on the ground floor, those to the north being the Native female ward and the European female ward, and to the south one European male and one Native male ward. Over the porch is the operating room. At the south-west angle a masonry tower with a clock and water-cistern rises ninety-six feet, above which it carries a steep-pitched roof twenty-four feet high. The outbuildings include, besides those for cooking and servants separate quarters for three apothecaries, a dead house, and an infectious ward. A building to be used for a lying-in ward has been lately completed (October 1883) from a sum of £1000 (Rs. 10,000) left under the will of Mr. E. David Sassoon.

Science College (102)

The SCIENCE COLLEGE, on the main road between Poona and Kirkee, on the left or west side of the Mutha river, was built in 1869 at a cost of £18,164 14s. (Rs. 1,81,647), of which £5000 (Rs. 50,000) were contributed by Sir Cowasji Jehangir Readymoney. It is in the Saracenic-Gothic style built of the local gray trap and covered with a low-pitched tiled roof. In plan the building is nearly a square (111'x 109') and it may be best described as a large central hall (62½' by 30' and 42' to the top of the walls) covered by an open roof carried on iron arched girders, and surrounded on three sides by double-storeyed arcaded corridors 81/2 wide, round which central hall and opening into whose corridors are the other rooms of the college. The north-west corner of the building rises to a third storey and above that carries a square tower 67' from the ground to the eaves covered by a low-pitched tiled roof with overhanging eaves. Beneath the tower flights of stairs lead to the upper storeys. The porch is in the centre of the north face, and the entrance leads into a vestibule 13' by 20' having arched openings into the centre hall. On each side of the vestibule is a small office or room, and a passage leading on one side into the laboratory, a room 30' by 20', and on the other to the stairs leading to the first floor. To the east of the hall is a lecture room, 51' by 19', protected to the east on the outside by an open arcade, and another lecture room 29' by 20' having a similar arcade on its southern face. To the west of the central hall are three class rooms each 19' by 19'. On the first floor, over the vestibule, is a museum 49' by 20', and on the same face a lecture room 20' by 30'. To the east of the central hall are two lecture rooms one 50' by 19', the other 391/2 by 20' both shaded by outside arcades. To the west are three rooms one 30' by 20', and two 19' by 14'. On the second floor are the quarters of the Principal. The building was designed and built by Mr. W. S. Howard, C. E. Executive Engineer Poona and Kirkee, and completed in 1869. Attached are workshops and a foundry built at a cost of £282 (Rs. 2820) where the students do practical work under carpenters smiths and fitters.

Sindia's Tomb (103)

SINDIA'S TOMB or *chhatri* is on the left bank of the Bahiroba stream in the south-east corner of Vanavdi village three miles south-east of Poona. The *chhatri*, literally umbrella or pavilion, consists of a small hamlet of about forty houses surrounded by a fifteen feet Wall which runs about eighty yards north to south and fifty yards east to west. The chief entrance to the hamlet is on the south-west. Besides the houses there are three shrines inside the wall, small shrines of Maruti and Mahadev, and Sindia's chhatri which is an earth-filled temple thirty feet high, much like a grass-grown mound pierced by stone pillars. Mahadev's temple is a low building (40' by 25') with a wooden hall and a small shrine. Behind Maruti's temple is a wrestling pit. Close by is a stable containing a horse sacred to Mahadev which marches before the temple litter on procession days. The staff of the two temples, numbering about twenty-five people, are maintained by the present Sindia. [Mr. R. A. L. Moore, C. S.] The tomb belongs to Mahadji Sindia who died at Vanavdi in 1794 and was burnt on this spot. [Grant Duff's Marathas, 502.] About 1830 Jankoji Sindia, the great-grandson of Mahadji, began to build a large monument in memory of his great-grandfather but died in 1842 leaving the work unfinished Since Jankoji's death the tomb has enjoyed a yearly allowance of £350 (Rs. 3500) most of which is distributed among religious beggars on the anniversary of Mahadji Sindia's death which falls in February. [Colonel C. D 'U. La Touche.]

Small Arms Factory(104).

[Contributed by Lieut. Colonel Wake, R. A] The SMALL ARMS AMMUNITION FACTORY stands on the site of Kirkee village which was bought by Government for building a fort, the tracings of which were marked about 1868 though work has not yet been begun. [A committee is (July 1884) sitting to decide on the site and nature of a place of refuge which will probably be near the fort site and may perhaps supersede it, colonel Ducat, R, E,] The factory lies within the limits of the proposed fort, and consists of a main factory (200' by 100') with fifteen other buildings, the entire premises occupying eight acres of land enclosed by a rubble stone wall. The main factory has a boarded floor and a double roof in five spans, resting on iron columns twenty feet high and twenty feet apart braced together by longitudinal and cross girders. The roof is of corrugated iron without and lined with wood within. Between the corrugated iron roof and the wooden roof is an air space 1' 4" broad, and a Louvre board runs along the apex of each span from the inside of the factory to the outside air. This contrivance gives a through current of air between the two roofs and ensures perfect ventilation in the workshops. Of the fifteen other buildings, nine enclosing 7950 square feet are for the different processes of loading and filling cartridges; three outhouses and two small magazines are for laboratory work for making fuzes, friction tubes, rockets, long hights, and other war stores; and one is a store room (300' x 25'). All the buildings are connected with the main factory by a tramway 1' 6" wide with turn-tables in front of each room admitting lorries, thus leaving the tram line clear for wagons going to other departments.

The factory makes two kinds of cartridges Martini-Henry and Snider, both built varieties being formed of a number of parts put together. A Martini-Henry cartridge case is composed of twelve parts, an anvil, a base disc, a cap, a cap chamber, a case body, an inside and an outside cup, three jute wads, a paper wad, and a wax wad, a strengthening

coil, and a bullet 480 grains ± 2 grains. After the case has been put together and the base disc rivetted to the cartidge by piercing and bending over the crown of the cap chamber on to the paper wad to form the rivet, the case is charged with eighty-five grains of R. F. G.2 powder. The charges are thrown charges from a Caffin's filling machine and the limit of error allowed is 85 grains ± 2 grains. After the charge has been put into the case it is wadded with a solid wax wad 190" thick and on the top of this wax wad two jute wads are placed. The cartridge is then shaken to let the powder down into the case and bulleted with a bullet weighing 480 grains ± 2 grains. The bullet has a diameter of '449" to 451" and a length varying from 1.28 high to 1.26 low. The bullet is secured in its place by two grooves made outside on the neck of the cartridge which press the brass of the case into corresponding grooves in the bullet. The E. F. G. 2 powder with which the cartridge is charged should vary in density from 1.72 to 1.75. It should contain not more than 1.2 or less than 0.9 per cent of moisture; and 85 grains of it fired from a Martini-Henry rifle with the service cartridge should give the bullet a muzzle velocity of 1290 to 1340 feet the second. [The velocity of the powder is taken with an electric instrument. In calm Weather the Martini-Henry cartridge should make a figure of merit at 500 yards, the mean of twenty shots not over fifteen inches.]

The Snider cartridge is also a built cartridge composed of an anvil, base disc, cap, cap chamber, inner base cup and outer base cup, case body, cotton-wool, and bullet. After the parts are put together the case is charged with seventy grains of R. F. G. powder with a density of 1.58 to 1.62. Half a grain of cotton-wool is placed over the powder and it is then ready to receive the bullet, weighing 480 ± 2 grains, with a diameter of .573" to .575" and 1.03 to 1.05 long. The bullet is smeared with a beeswax lubrication.001" thick and fitted with a clay plug to expand the bullet and drive the lead into the grooves of the rifle when the cartridge is fired.

The factory is capable of turning out 45,000 Snider or 20,000 Martini-Henry cartridges a day. From want of room and supervision only one kind of ammunition can be made at a time. The making of breech-loading ammunition is intricate and difficult. To make one cartridge requires over 150 operations and the limit of error allowed in the different parts averages only about 2/1000 of an inch.

The machinery used is chiefly for punching and stamping. It is worked by three Lancashire double-flued boilers twenty feet long and six feet in diameter, two of which are generally used. The average daily consumption of coal is about 1½ ton. A 2½" shafting, on supports 6' 8" apart, is carried on the columns and brackets from the girders. The shafting which makes 150 revolutions in a minute is driven by a high pressure engine of twenty horsepower direct from a belt from the flywheel on to the shafting. The shafting is lubricated with needle lubrications and the whole is driven by bands joining one line of shafting with another.

The factory establishment consists of about 400 workmen with a superior staff of twenty. The superior staff includes a Superintendent, a chief and an assistant engineer, two chief and five assistant foremen, and ten other overseers and clerks. The number of workmen taken and paid by the day averages 400 and sometimes rises to 800. Their monthly

wages vary from 8s. to £6 (Rs. 4-60). The skilled workmen are Europeans born in India, Eurasians, Portuguese, Hindus, Musalmans, Parsis, and Chinamen, and the unskilled labourers are Marathas from the villages round Kirkee. Where possible the labourers are paid by piece work a system for which they have a great liking. They are hardworking and eager to make money.

Soldiers' Gardens (105)

The SOLDIERS' GARDENS cover forty-one acres on the left bank of the Mutha canal and of the Bahiroba stream in Ghorpadi about 250 yards north of St. Patrick's church on the east border of Poona cantonment. It was originally intended as a garden to be worked by the garrison troops. This idea was given up and for a time the gardens were kept by the cantonment authorities and then closed and given for tillage. In 1878 the gardens were revived and improved by Sir Richard Temple, then Governor, and placed in charge of the Executive Engineer Poona and Kirkee. A military band plays twice a week. During the present year (1884), because of their distance from Poona, the transfer of the Botanical Gardens from Ganeshkhind to the Soldiers' Gardens has been sanctioned and is (September) being carried out.

Soldiers' Institute (106).

The SOLDIERS' INSTITUTE and Assembly Rooms, near the centre of the cantonment about 140 yards north of the Gymnasium, consist of a permanent building tiled and in good repair. The building contains one main hall (89' by 63'), one exhibition room (70' by 25'), three lamp rooms (each 20' by T 6"), one store room (7' 6" by 10' 3"), one office room (20' by 7'6"), two drawing rooms (each 17'6" by 12'), and two bath rooms (each 5'6"by 5'6"). During the rains the building is used for the Soldiers' Annual Industrial Exhibition. At other times it is available for theatricals, pennyreadings, and other entertainments.

St, Andrew's Church (107).

ST. ANDREW'S Church in the Vanavdi Lines, set apart for the use of members of the Established Church of Scotland, was built by Government about 1861 and has room for about 500 people.

St, Anne's Chapel (108).

ST. ANNE'S CHAPEL in the Sholapur Bazar is of brick built in 1871 at a cost of £700 (Rs. 7000). The chapel, which is subordinate to the city Roman Catholic church of Nossa Senhora da Conceicao, has an altar, fourteen stations of the way of the cross, and two pictures of the Sacred Hearts of Jesus and Mary. The chapel has room for 350 and the congregation, consisting mostly of Goanese cooks and butlers, numbers about 225. A mass is held every Sunday and on obligation days.

St. Mary's Church (109).

ST. MARY'S CHURCH, within cantonment limits, on the high ground in the south-east corner of the Native Infantry Lines, is a large building with a belfry. It is 118 feet long and eighty-five feet broad at the chancel with room for about 900 people. It was consecrated in 1825 by Bishop Heber who describes it as spacious and, convenient but in bad architectural taste. In the interior are six lofty round pillars, two shorter round pillars, and two square pillars with tablets. The baptismal font is in the south-west corner of the church and is surrounded by handsome stained-glass windows. The church has numerous tablets, some of them belonging to officers of distinction. Here is buried Colonel Morris, C. B., famous in the battle of Balaklavs (1854) who died in 1858; and Lieutenant C. A. Stuart of the Madras Army who fell mortally wounded on the 28th of January 1858 while leading the men of the 4th Nizam's Infantry against a body of insurgent Bhils strongly posted at Mandvar in the Malegaon sub-division of Nasik. [Details are given in the Nasik Statistical Account p. 200.] There are also tablets to five officers of the 27th Bombay Native Infantry and five officers of the 8th Royal Regiment of Foot. One tablet is in memory of Captain Thomas Ramon who died on the 5th of November 1815 at Mandvi in Cutch. The' Christian Temple' to which this tablet refers, as designed by his genius and built by his hand, is not St. Mary's but the large church in Kaira in Gujarat in which the tablet was originally meant to have been placed. Two other tablets are to Lieutenant J. W. McCormack of H. M's 28th Regiment who, on the 6th of October 1859, was killed at the storming of Bet in west Kathiawar with four non-commissioned officers and eight men; and to Major Henry C. Teesdale who fell in front of the colours of the 25th Regiment of Native Infantry when commanding it, at the battle of Meeanee in Sind on the 17th of February 1843. With Major Teesdale are associated the names of Lieutenant C. Lodge who was killed in action at Kotru in Kachh Gandava in Beluchistan on the 1st of December 1840, of Captain C. Rebenac, of Ensign Browne who was killed by accident at Karachi, and of eighteen other officers of the same regiment, one of whom, Colonel Robertson, was a C.B. and A.D.C. to the Queen. The church also contains tablets to Lieutenant Malcolm G. Shaw of the 3rd Light Cavalry who died of sunstroke at the battle of Beawra, and to Lieutenant Augustus Charles Frankland, with the motto 'Franke Lande, Franke Mynde', who was killed in a charge at the battle of Khushab in Persia on the 8th of February 1857. Another tablet is to Captains Seton and Peile and eighty-one noncommissioned officers and privates of the 1st Bombay Fusiliers who died of cholera at Karachi; also, on the same tablet, an inscription to Captain Rawlinson, Lieutenant A. P. Hunt, and 140 non-commissioned officers and privates who died before the return of the regiment to the Presidency; also, on the same tablet, an inscription to Lieutenant W. A. Anderson who was murdered at Multan, and to twenty-two non-commissioned officers and privates who were killed during the siege of Multan.

St. Patrick's Church (110).

ST. PATRICK'S CHURCH is a plastered stone building built by English soldiers at a cost of £1800 (Rs. 18,000) and blessed by the Right Reverend Bishop Hartmann in 1855. The cost was almost entirely borne by Catholic soldiers especially of Her Majesty's 64th 83rd and 86th Regiments, of, the Bombay Fusiliers, and of the Royal Artillery. The church has room for 700 people. The congregation consists chiefly of European soldiers

serving in the Poona garrison and their families, and the Native Christians of the native regiments. The church has a font enclosed in a wooden case and a harmonium.

St. Paul's Church (111).

ST. PAUL'S CHURCH, within suburban municipal limits about fifty yards south of the post-office, is a plain stone building with belfry and small windows. The inside is plain but it has four handsome stained-glass windows over the Communion Table. The church was built by Government after the style of the Sainte Chapell in Paris, from drawings by the Rev. Mr. Gell, B.A., and consecrated by Bishop Harding in 1867. It is intended for the use of the civil and military officers living in the Staff and Civil Lines and has 225 seats all of which are free. The north seats are kept for local residents and the south seats are open to all. The whole expenses of the church and worship are borne by the offerings of the congregation. The communion is celebrated every Sunday and at all other festivals. Morning prayer is said daily throughout the year, and during Advent and Lent special evening services are held,;

St. Xavier's Church (112).

ST. XAVIER'S CHURCH in Convent Street, Sadar Bazar, is a substantial stone building in the Gothic style built about 1865 at a cost of £1900 (Rs. 19,000). The entrances are sheltered by small Gothic arches. The nave measures 70' 6" by 30' 6" and the chancel 30' by 18' 6". The church has a steeple seventy-one feet high with two bells, a gallery at the west end 30' 6" by 15' for boys and singers with a harmonium, a small vestry 15' 13" off the chancel, a baptistry with font at the side entrance, three Gothic altars with statues from Munich, and a large stained glass window in the back wall of the sanctuary representing in panels scenes from the life of St. Francis Xavier. The church has room for about 500 people, the congregation consisting of about 400 European Eurasian and Portuguese clerks, tradesmen, and pensioners. The church has a regular morning and evening service and a double morning service on Sundays. Attached to the church is the Poona Convent orphanage and day school for girls under the Religious Nuns of Jesus and Mary. The building consists of three wings in two storeys joined by an angular tower and a separate day school. There are thirteen inmates, eighty boarders, fifty day scholars, and thirty native cholars. Opposite the convent is St. Vincent's school and parish house. The buildings of St. Vincent's include two dwellings and a large two-storeyed school-house built about 1867 at a cost of £4000 (Rs. 40,000), which included a Government contribution but was mostly provided by the Roman Catholic Bishop of Bombay. The school is managed by the Fathers of the Society of Jesus with lay teachers and has 260 pupils, European, Eurasians, Portuguese, Parsis, and a few Hindus and Musalmans.

Under St. Francis Xavier's church is a small chapel in the Camel Lines for a Madras Christian community of over 400. The chapel is a simple iron roofed brick building with room for about 200 people A service is held on Sundays. Attached to the chapel is a *Small* school with thirty boys and girls.

Synagogue (113).

The SYNAGOGUE, a handsome red-brick building with a lofty tower and spire, is in the south-east corner of suburban municipal limits, about 450 yards south of the post-office. It was built in 1867 by the late Mr. David Sassoon. It is a lofty church-like structure in the English-Gothic style, built of red brick with trap stone archwork and window mullions. The body of the interior is 62'by 44½ and 30' high to the planked ceiling with galleries on three sides supported on pillars which are carried through to the roof. At the west end is an apse at the end of which a curtain or veil hides the recess where the holy books are kept. The floor, which is of polished stone, is free from anything but a few chairs and movable seats. At about one-third of the length from the apse, and in front of it is a raised wooden platform surrounded by railings on which the officiating priests stand. The windows are in small panes of coloured glass. At the east end over the porch a red brick-tower 90' high carries a clock and bells and is surmounted by a spire.

Towers of Silence (114).

Among a few trees, on a low bare ridge called the Gul Tekdi, about half a mile south-east of Parvati hill, are two Parsi TOWERS OF SILENCE, about half a mile apart. Of the two towers one, enclosed by a wall, was built by Mr. Sorabji Ratanji Patel on the 29th of April 1825. Two fire-places or *sagris* are near this tower and a third is (July 1884) being built. The second tower was built by public subscription on the 28th of April 1835 at a cost of about £507 (Rs. 5070) and was enclosed by a wall in 1854. A road has lately been made between the public road leading to the slaughter house and the first Tower. There is no made road up the hill to the second Tower.

United Service Library(115).

The UNITED SERVICE LIBRARY is in the Native Infantry Lines to the north of St. Mary's church. It is a plain building with five rooms and a veranda all round. Of the five rooms two (75' by 25 and 25' by 14') are large and the other three are side rooms. The Library contains about 10,000 works and is especially rich in works on India. It takes twenty magazines and twenty-two newspapers seventeen English and five Anglo-Indian. It is open to officers of the Civil Military and Naval Services and in July 1884 had 145 subscribers and an income in 1883 of £491 (Rs. 4910) realised by subscriptions at the rate of £3 (Rs. 30) a year, £1 16s. (Rs. 18) a half year, £1 2s. (Rs. 11) a quarter, and 8s. (Rs. 4) a month. [The income of the library from January to June 1884 was Rs. 2424. The income for 1877 was Rs. 4394, for. '878 Rs. 4033, for 1879 Rs. 3800, for 1880 Rs. 3634, for 1881 Rs. 4531, and for 1888 Rs. 4730.] In 1860 Poona had a library called the Poona Station Library owned by thirty-two shareholders. In July 1860 Sir W. Mansfield then commander-in-chief proposed to establish in Poona an institution similar to the Royal United Service Institution, London. The object of the new institution was 'the formation of a library containing historical scientific and professional works, maps, charts, and plans, the delivery of lectures, the collection of inventions and natural curiosities, and, if possible, the publication of a journal; the collection of native arms and a museum to serve as a central depository for objects of professional and general information and for trophies and relics connected with Indian history. The proposal found favour and the institution was called the United Service Institution of Western India. The shareholders of the Poona Station Library handed over their building and library of about 2000 volumes as a nucleus, and the institution, whose funds were vested in trustees, became the property of the station. In 1867, after seven years' experience, the institution was not found to work well, and at a general meeting of subscribers, it was resolved to use the library only as a Reading Room and to change the name to the United Service Library Poona. The museum was sold by auction and a committee of seven was appointed to manage the library restricting it to the purposes of a Reading Room, the footing on which it noil works.[Professor G. W. Forrest.]

Vanavdi Barracks (116).

The VANAVDI BARRACKS, also known as the Right Flank Barrack from their situation to the right or south of the military cantonment, stand on high ground. Besides the sergeants and staff of a European regiment the barracks can accommodate 1006 rank and file. The barracks consist of double storeyed blocks arranged in open order, so that each block gets a share of the breeze. From time to time older buildings have been pulled down to make room for the present barracks. The buildings include eight older blocks completed in 1861 of brick and lime plastered, each to hold sixty men and two-sergeants. On each floor the blocks have a barrack room (109'by 25'and 18'high) and sergeants' quarters of two room each 12' by 13'. Both floors are surrounded by enclosed verandas eleven feet wide with windows glazed and venetianed. To these verandas the barrack rooms open on their longer sides by arched openings between pillars which carry the floor or roof above. Six other blocks were completed in 1872. They are two-storeyed of stone masonry surrounded on both floors by open verandas; the lower with masonry arches, the upper with posts. Each block contains on the ground floor and on the first floor two barrack rooms (87' by 24' and 18' high) with a sergeant's quarters between. The blocks were built according to the sanitary regulations and standard plans in force at the time. Except the older blocks, which have washrooms under the same roof as the barrack rooms, all have cook-rooms, washrooms, and latrines as outbuildings. There are eight staff sergeants' quarters and the patcherries or married men's quarters have room for eighty married men. The barracks include separate buildings for Guard-rooms, Cells, Hospital, Female Hospital, Medical Staff Quarters, Armourer's Shop, Workshop, Store, Canteen, Sergeants' Mess, and a Ball Court and a Skittle Alley. These quarters have from time to time been built or adapted from old ones according to standard plans and regulations in force at the time by successive Executive Engineers of Poona. The total cost of the barracks as they stand is £151,031 (Rs. 15,10,310).

Welleshy Bridge (117).

The WELLESLEY BRIDGE, -1. 14 miles west of the post office, crosses the Mutha river close above its meeting with the Mula. It replaces a wooden bridge which was built in 1830 and called the Wellesley bridge in honour of General Wellesley's conquest of Deccan in 1803. In 1870, as it had become unsafe and was too narrow for the traffic, the old bridge was pulled down and the present masonry bridge begun. It is a substantial stone structure of strong coursed masonry and consists of eight segmental arches of 52 ½ 'span, with a rise, of 13' and 2 ½ 'thickness of arch-ring, carrying a roadway, 28' wide at

a height of 47' above the deepest part of the river bed, protected on both sides by a neat dressed-stone parapet. It was designed by Lieutenant Colonel A. IT. H. Finch, R.E. Executive Engineer Poona, and built under his superintendence by Messrs. White and Company contractors;, It was opened for traffic in 1873 at a cost of £11,092 (Rs. 1,10,920). A tablet on the bridge has the following inscription:

The original wooden structure, named in honour of the victories obtained in the Deccan by Major-Genl. Arthur Wellesley (afterwards F. M. the Duke of Wellington, K.G.), constructed by Captain Robert Foster, Bombay Engineers, at acost of Rs.91,892, and opened in 1830 by the Honourable Major-General Sir John Malcolm, G. C. B., Governor of Bombay, haying become decayed and unsafe for traffic, was removed, and the present bridge, designed and constructed by Colonel A. U. H. Finch, R-E., at a cost of Bs.110,932, was opened to the public in May 1875; His Excellency the Honourable Sir Philip Wodehouse, K. C. B., Governor and President in Council.

Yeravda Central jail (118),

The YERAVDA CENTRAL JAIL, Poona, intended for the confinement of long-term and dangerous prisoners, as well as for relieving the overcrowding of the several district jails throughout the Presidency, is situated three and a quarter miles north of the post office. The present structure, built altogether by convict labour under the supervision of the Public Works Department, was begun in 1866 and finished in 1880, previous to which, and whilst under construction, the prisoners were located in temporary barracks and tents. The outer wall, sixteen feet high and 1¼ miles all round, covers an area of fifty-nine acres. Within this enclosure are three circles or in fact jails on the radiating system, hospital, barracks, cook-house, dye-house, European jail, separate, solitary, and dark cells, store rooms and offices. The jail has accommodation for 1600 prisoners, and during the 1876-77 famine held over 1800, the workshops being then temporarily turned into dormitories.

At the end of 1883, 911 prisoners were confined in the jail, the average daily number during the year being 1016 and the average yearly cost of each prisoner being £6 6s. (Rs. 63). The prisoners are employed extramurally on the several gardens in connection with the jail, and hired out to contractors for unskilled labour, and intramurally on the various industries carried on in the factory, chiefly carpet-making, coir-work, cane-work, carpentry, french polishing, and printing. The factory work is well known for its superior quality throughout India and also in Europe and America.

The officer in charge is styled the Superintendent, but performs also the duties of a medical officer, the appointment being now invariably held by a medical man who enjoys a monthly salary of £70 (Rs.700) rising to £95 (Rs. 950). The jail establishment consists of a jailor, a deputy jailor, three European warders, one steward, two clerks, two hospital assistants, and sixty-four warders or peons, the yearly cost of all, exclusive of Superintendent, being £2040 (Rs. 20,400). In addition to the above establishment a military guard, consisting of one jamadar and thirty-four rank and file, is always present at the jail to assist in quelling emeutes.

A school, inspected yearly by the educational department, is kept at the jail, one or two educated men amongst the convicts being appointed teachers. Urdu, Marathi, and Kanarese and elementary exorcises in arithmetic are taught. The Poona Meteorological Observatory is situated at Yeravda in charge of the Superintendent of the jail. The jail establishment, inclusive of the Superintendent, reside in quarters near the jail, the Europeans on the south or front side, and the natives on the north or rear of the jail.

POONA:

History.

The name Poona, as its Sanskrit form Punyapur or Cleanser shows, probably refers to the holy meeting of the Mutha and the Mula close to which it is built. Its religious position, and its trade position on one of the main approaches to the Bor pass, mark Poona as likely to bean early settlement. The earliest known remains in the neighbourhood are the Shaiv cave at Bhamburda about one mile and the cells in the Ganesh khind hills about two miles to the north-west of the city. The Ganeshkhind cells are plain and small and of uncertain age; the Bhamburda cave is believe d to belong to the seventh or eighth century. [Lord Valentia's (1803) collection of poona agates (Travels, 11.113) and the number of agates and chalcedonies which may still lie found near (Ganeshkhind suggest that poona may be Ptolemy's (A.D. 150) Pumiata in which are beryls so known Perhaps to distinguish it from the other Punnata or Punnatu which Mr. Rice has discovered in the Maisur State (Ind, Ant, XII. 13; Sewell's Southern India dynasties, 86). It is worthy of note that poona appears as Panatu, almost the same as in Ptolemy, in the map of the arccarate English traveller Fryer (1673 -1675), the 't' in both cases seems to represent the nasal 'e' which survives in a weaker form in the spelling poone] According to local tradition in A. D. 613 (Shak 535) Poona was a hamlet of about fifteen huts two of Brahmans and the rest of fishermen and musicians. At each corner to ward off evil were the temples of Bahiroba, Maruti, Narayaneshvar and Puneshvar, and a Mhasoba, of which the Mhasoba and the Maruti. and an old temple of Puneshvar, now the shrine of the younger Shaikh Sala, remain. To the east of Poona were (A. D). (613) two small villages' Kasarli and Kumbharli which have been absorbed in the city. [As ass stone or gadhar dagav which still remains is said to mark the herders of the three hamlets. A proof that poona includes three separate villages remains in the fact that there are three families of grant-enjoying Mhars. Of the three 'chavdis village offices and three Bahirobas or village guardians two chavdis and two Bahirobas remain.] In A.D. (1290) (Shak 1212) Poona seems to have been taken by the troops of Ala-ud-din the Khilji emperor of Delhi (1295-1315). The memory of the Musalman conquest survives in a local story that Hisa Mohidin and four other Musalman ascetics came to the hamlet and turned the two temples of Puneshvar and Narayaneshvar into the two Musalman Shrines or dargahs (31) of the elder and the younger Shaikh Sallas. [These shrines are described above pp. 343-344. They have still many traces of their Hindu origin.] Under the Mussulmans, according to local tradition, an Arab officer and a small force were stationed at Poona. Barya the Arab commandant fortified the town or kasba by a bastioned mud wall with three large gates, the Kumbharves on the north, the Kedarves on the east, and the

Mavalves on the west. The ruins of this wall, now called Pandhricha Kot, remain and the part, of the city within its limits goes by the name of Juna Kot (24). It is said that only the garrison and the Musalman inhabitants lived within the wall. The hereditary or sthaik and the casual or *upri* Hindu land-holders traders and Brahmans lived outside of the walls Poona prospered and grew. Four new wards or peths were added, two to the south Mohiyabad now called Budhvar and Malkapur now called Aditvar, one to the east Astapura now called Mangalvar and one tot he west Murchudabad now called Shanvar. In 1595 king Bahadur Nizam II. (1596-1599) ennobled a Maratha named Maloji Bhonsla the grandfather of Shivaji the Great and gave him the estates of Poona and Supa with the forts and districts of Shivner and Chakan. In 1620 the town suffered much from the exactions of Siddhi Yakutray the Poona commandant of the Ahmadnagar minister Malik Ambar (1607-1626). Many people left and a few years later (1629-1630)[This was the 1629-30 famine. Compare Elphinstone's History, 507; Elliot and Dowson, VII. 24-25.] the town was for three years wasted by famine. In 1630 Murar Jagdevray, the minister of Mahmud the seventh Bijapur king (1626- 1656), while engaged in the pursuit of Shahaji, burnt Poona, threw down the walls, passed an ass-drawn plough along the foundations, and fixed in the ground an iron rod as a sign that the place was accursed and desolate. The effect of the curse did not last long. In 1635 the same Mahmud of Bijapur, on the occasion of his entering the Bijapur service, confirmed Shahaji Bhonsla the son of Maloji Bhonsla and the father of Shivaji in his father's estates of Poona and Supa. Shahaji made Poona the headquarters of his territory and appointed a Deccan Brahman named Dadaji Kondadev to manage it from Poona. Under Dadaji the place flourished. The land rents were lowered and the unsettled hill people were employed as guards and messengers and to destroy the wolves by which the country round Poona was then overrun. [East India Papers, IV. 420.] Dadaji appointed one Malthankar to be commandant of Poona. To remove Murar Jagdevrav's curse (1630) Malthankar pulled out the iron rod, passed a golden plough along the line of the fortifications, held a *shanti* or peace-making to- drive away the evil spirits, and rebuilt the wall. [N. V. Joshi's Marathi Account of Poona, 8.] Settlers were granted land free of rent for five years and with only a tankha rent in the sixth year. At the same time on the southern limit of the town Dadaji built a large mansion called the Lai Mahal (1)[The Lal Mahal now called Ambarkhana (1) as the Peshwa's elephant canopies or *ambaris* were kept there, is still in repair. See above p. 331.] or Red Palace for Shahaji's wife Jijibai and her son Shivaji. Jijibai also built the temple of Ganpati which is now called the Kasba Ganpati (12). In 1647 Dadaji Kondadev died and Shivaji took charge of his father's Poona estates, including the city. In 1662, to punish raids on Moghal territory close to Aurangabad, Shaiste Khan the Moghal governor advanced from Aurangabad with a great force towards Poona and Chakan, and Shivaji, who was in Supa, retired to Sinhgad; Supa fell, and in spite of much annoyance from Shivaji's horse, the Musalmans pressed on and took Poona. [Elliot and Dowson, VII. 261-262.] Shaiste Khan took Chakan fort, eighteen miles north of Poona, and several other Poona strongholds, and in 1663 came to live in Poona in the Lal Mahal, Shivaji's home. [Shaiste Khan settled the Shaistepura Peth now called Mangalvar Peth, See above p. 274.] In spite of the precautions which had been taken to prevent armed Marathas entering Poona Shivaji determined to surprise the Moghals. He sent two Brahmans in advance to make preparations. One evening in April a little before sunset Shivaji set out from Sinhgad with a considerable body of foot' soldiers. These he posted in small parties

along the road and took with him to Poona two of his most trusted men Tanaji Malusre and Yesaji Kank and fifteen Mavlis. The Brahmans had won over some Marathas in Shaiste Khan's employ who arranged that two parties of Marathas should enter the town one as if a wedding party the other as if bringing prisoners, and that Shivaji and his twenty-five should pass in with them. Shivaji's party passed safely, put on their armour, and, at the dead of night, by secret ways reached Shaiste Khan's house which Shivaji well knew. They entered through the cook-house, killed the cooks, and as they were cutting through a built-up window, the alarm was raised. Three of the Mavlis forced themselves into Shaiste Khan's room, but two fell into a cistern of water and the third, though he cut off Shaiste Khan's thumb, was, killed by his spear. Two slave girls dragged Shaiste Khan to a place of safety. [This is Khafi Khan's account in Elliot and Dowson, VII. 270-271. According to Grant Duff (Marathas, 88) Shaiste Khan's fingers were cut off as he was letting himself out of a window.] The Marathas killed many of his followers, cut to pieces some of the women, and cut off the head of an old man whom they took for Shaiste Khan. The kettledrums beat an alarm and the Marathas retired, lighting torches and burning bonfires as they went up Sinhgad in derision of the Moghals. [Elliot and Dowson, VII. 270-271.] Later in the same year Shivaji came to Poona to hear a katha or song sermon by the Vani saint Tukaram and narrowly escaped being taken prisoner by the garrison of Chakan. [Grant Duffs Marathas, 89. According to the Marathas, Shivaji escaped by the help of Vithoba of Pandharpur, In 1662, Shahaji came to Poona to visit Shivaji, who was then thirty-five years old and in great power. Shivaji omitted no means of showing his father respect. He walked several miles before his palanquin, attended him as a servant, and refused to be seated in his presence. [Grant Duff's Marathas, 85.] In 1665 the new Moghal viceroy Jaysing came to Poona, arranged its affairs, and spread his forces over the country. [Grant Duffs Marathas, 92.] In 1667, after his famous escape from Delhi, Shivaji obtained from Aurangzeb the title of Raja, and Poona Chakan and Supa were restored to him. [Grant Duff's Marathas, 98,99.] In 1674 the transfer of Shivaji's head-quarters to Raygad hill in Kolaba reduced the importance of Poona. About 1675 Poona appears as Panatu in Fryer's map. [New Account, 50,] In 1679 Poona was in charge of Naro Shankar Sachiv one of Shivaji's eight ministers. [Marathi Account, 14.] Shivaji died in 1680. In 1685 Aurangzeb sent a noble named Kakad Khan to Poona who is remembered as having introduced the unpopular order of obliging the people to recognize Golak or bastard Brahmans as family priests or upadhyas. The town people in despair are said to have appealed to the gods but the gods upheld Kakad Khan and the bastards. [Marathi Account, 14.] In 1688, according to local tradition, Aurangzeb, finding that the Musalman wards were deserted and overgrown with trees, sent one Mohanlal to resettle the town. Mohanlal died while attempting to restore the town and Aurangzeb in his honour called the town Mohiyabad. About 1703 Aurangzeb encamped with his army for a month in a jujube or bor grove [The jujube grove was on the site of the present Bhavani ward.] south of Poona and settled a new ward called Mohiyabad near the grave of Mohanlal. [Marathi Account, 15. According to Khafi Khan (Elliot and Dowson, VII. 373) the Peth was called after Muhiu-1-Mulk the grandson of Alirangzeb who died at Poona.] In 1707 Lodikhan, commandant of Poona, was defeated by Dhanaji Jadhav the general of Tarabai the aunt of Shahu. [Grant Duff's Marathas, 185.] In 1708 Shahu was established at Satara, while Poona remained under the Moghals, Shahu claiming the chauth and sardeshmukhi rights over it. Shahu's representative at Poona was Balaji

Vishvanath, afterwards the first Peshwa, and the Moghal officer was a Maratha named Rambhaji Nimbalkar. Under this double government, which lasted till 1720, Poona suffered severely and the city was once plundered by the Nimbalkar's orders. [Marathi Account, 16, See Part II. p. 241.] In 1720 the double government ceased as, under the Delhi home-rule grant, Poona became one of Shahu's sixteen svarajya districts. In 1721 Balaji died and was succeeded as Peshwa by his son BajiraV, who appointed one Bapuji Shripat to be manager or *subhedar* of Poona. Bapuji persuaded many merchants to settle in Poona. [Marathi Account, 18.] In 1728 the old city wall on the river bank was pulled down and sites for mansions allowed to the Purandhare and Chitnis families, and, between 1729 and 1736, the Shanvar palace (32) was built near the Mavalves. In 1731 Bajirav remained at Poona and employed himself in improving the internal management of Maratha affairs. He continued at Poona Dabhade Senapati's practice of feeding some thousands of Brahmans for several days. He also gave sums of money to the assembled religious doctors styled Shastris and Vaidiks. The festival was continued by his successors and was known by the name of dakshina or money gifts. [Grant Duff's Marathas, 225. Details are given above pp. 48, 62-64. Of minor city works belonging to the time of Bajirav Peshwa (1720-1740) the chief are the temple of Omkareshvar (23) begun at his private expense by Bajirav's brother Chimnaji Appa, the temple of Amriteshvar (2) built by his sister Bhiubai, and a pigeon house.

1739.

In 1739 Captain Gordon, a British envoy to Satara, perhaps the first European who visited Poona, found the districts round Poona flourishing. The rent of land was low and husbandmen were drawn from other parts of the country. In and near Poona were many signs of prosperity. The crowded streets were lined with handsome houses. In a large foundry was the form of a thirteeninch mortar and considerable progress had been made in the art of running iron for shot and casting shell small cohorns and great guns. Weavers were encouraged and the produce of the Poona looms was sent to various parts of India and in large quantities to Bombay. Poona was emphatically the city of the Peshwas, rising with them and growing with their growth. [Bombay Quarterly Review, IV. 95.] In 1740 Bajirav was succeeded by his son Balaji (1740-1761). In 1741, on the death of his uncle Chimnaji, Balaji spent nearly a year in improving the civil administration of Poona. From this till 1745, a period of unusual quiet, Balaji caused marked improvement in the country. [Grant Duffs Marathas, 264.] In 1749 Shahu the Raja of Satara died. Before his death Balaji had obtained a deed empowering him to manage the Maratha empire. In 1750 he came to Poona which was now the capital of the Maratha empire. [Grant Duffs Marathas, '270.] About this time the French missionary Tieffenthaler describes Poona as the capital of a Maratha prince of the Brahman caste. The town was well peopled and the houses were built partly of brick and partly of mud. The head of the government lived in a fortress surrounded by walls. [Description Historique et Geographique, I. 484.] In 1751 as Damaji Gaikwar refused to comply with Balaji's demands he was surrounded and made prisoner and kept in confinement in Poona city till 1754. [Grant Duffs Marathas, 274] In 1756 Mr. John Spencer and Mr. Thomas Byfield, members of the Bombay Council, came to Poona and had a long interview with Balaji Peshwa. [Grant Duff's Marathas, 294-295.] In 1757 Anguetil Du Perron, the

French scholar and traveller, mentions Poona as the union of four or five villages in a plain with a common market and some one-storeyed houses. It was strictly a great camp of huts and was the actual capital of the Marathas and fairly prosperous. The market a broad street crossed the town from end to end. In it were all the merchandise of Asia and part of the goods of Europe which the English sent from Bombay four or five days distant. The riches were used by the Musalmans rather than by the Marathas. The Marathas had few wants. A piece of red cloth for the head, another white cloth for the waist, a third as a scarf, and some yards of cloth for winter. This was the dress of the richest. Their usual food was rice and pulse mixed with butter. If the Marathas were allpowerful European trade with India would perish. But the softness and luxury of the Moors more than makes up for the bare frugality of the Marathas. In the market were many run away Europeans. In many of the streets there was not one house worthy of notice and much stabling and forage. [Zend A vesta, 1. ccxxvii. ccxxix.] In 1761 Balaji Peshwa died at Parvat in Poona crushed by the ruin of Pauipat. [Grant Duff's Marathas, 320.] In Balaji's reign the Parvati lake was made, the city walls were begun, and the temples of Nageshvarav and Tulsibag were finished. [Marathi Description, 34-42.] In 1763 Nizam Ali of Haidarabad plundered Poona taking much property and destroying and burning all houses which were not ransomed. [Grant Duffs Marathas, 328; Eastwick's Kaisarnama, 70; wilks' South of india, In 1763 Peshwa Madhavray (1761-1772) assembled a large army at Poona to act against Haidar Ali of Maisur (1763 - 1782). [Grant Duff's Marathas, 330,] In 1768 Mr. Mostyn came to Poona as envoy from the Bombay Government to try and secure an assurance that the Peshwa should not join in alliance with Haidar and the Nizam, but Madhavrav refused to give the assurance and told Mr. Mostyn that he would be guided by circumstances. [See Part II. p. 253.]

In 1768 Madhavray surprised Raghunathray's army near Dhodap in Nasik and confined him in Poona in the Peshwa's palace. [Grant Duffs Marathas, 340.] In 1769 Janoji Bhonsla of Berar who supported Raghunathray began to plunder the country on the way to Poona. After Poona was, destroyed by Nizam Ali in 1763 Madhavrav proposed to surround it with a wall. This design was abandoned on the ground that no fortified plain city could ever be as safe as Sinhgad and Purandhar. On Janoji's approach the people of Poona sent off their property, and as no steps were taken to stop the plundering Madhavrav was forced to make a treaty with Janoji. [Grant Duff's Marathas, 341 -342.] In 1772 the Court of Directors ordered that a resident envoy should be appointed at Poona and Mr. Mostyn came to live in Poona as British envoy. [Grant Duffs Marathas, 371.] Madhavrav Peshwa died on the 18th of Nov. 1772 and was succeeded early in December by his younger brother Narayanrav who was murdered on the 30th of Aug. 1773. That morning a commotion broke out among the Peshwa's regular infantry at Poona. Towards noon the disturbance so greatly increased that, before going to dine, Narayanrav told Haripant Phadke to restore order. Haripant neglected his instructions, and in the afternoon Narayanrav, who had retired to rest, was awakened by a tumult in the palace where a large body of infantry, led by two men named Sumersing and Muhammad Yusuf, were demanding arrears of pay. Kharaksing, who commanded the palace guard, joined the rioters. Instead of entering by the open main gate, they made their way through an unfinished door on the east, which, together with the wall round the palace, had shortly before been pulled down to make an entrance distinct from the

entrance to Raghunathrav's quarters. On starting from sleep Narayanrav, closely pursued by Sumersing, ran to his uncle's room. He threw himself into his uncle's arms, and called on him to save him.Raghunathrav begged Sumersing to spare his life. 'I have not gone thus far to ensure my own destruction' replied Sumersing; 'let him go, or you shall die with him.' Raghunathrav disengaged himself and got out on the terrace. Narayanrav attempted to follow him, but Tralia Povar, an armed Maratha servant of Raghunathrav's, seized him by the leg and pulled him down. As Narayanrav fell, Chapaji Tilekar, one of his own servants came in, and though unarmed rushed to his master. Narayanrav clasped his arms round Chapaji's neck, and Sumersing and Tralia slew them both with their swords. Meanwhile the conspirators secured the whole of the outer wall of the palace. The tumult passed to the city, armed men thronged the streets, the shops were shut, and the townsmen ran to and fro in consternation. Sakharam Bapu went to the police superintendent's office and there heard that Raghunathrav had sent assurances to the people that all was quiet. Sakharam Bapu directed Haripant Phadke to write a note to Raghunathrav.

Raghunathray answered telling him that some soldiers had murdered his nephew. Haripant declared that Raghunathray was the murderer and fled to Baramati. Sakharam Bapu told the people to go to their homes and that no one would harm them. On that night Bajaba Purandhare and Maloji Ghorpade had an interview with Raghunathray, and Trimbakrav Mama bore off Narayanrav's body and burnt it. Visitors were received at the palace. Mr. Mostyn the English envoy, and the different agents, paid their respects, but Rughunathrav remained in confinement, detained, as was said, by the conspirators, as a security for the payment of their arrears. Raghunathrav was suspected, but there was no proof. He was known to have loved his nephew, and the ministers decided that until the contrary was proved, Raghunathrav should be held innocent and be accepted as the new Peshwa. Ram Shastri approved of this decision. At the same time he made close inquiries. After about six weeks he found a paper from Raghunathray to Sumersing, giving him authority to slay Narayanrav. Ram Shastri showed this paper to Raghunathray, who admitted that he had given an order, but persisted that his order was to seize Narayanrav, not to slay him. Examination of the paper confirmed Raghunathrav' statement showing that the word *dharave* seize had been changed to *marave* kill. This change, it was generally believed, was the work of Anandibai Raghunathrav's wife. It was also believed that it was under her orders that the servant Tralia Povar had taken part in Narayanrav's murder. When Raghunathrav confessed his share in Narayanrav's murder, he asked Ram Shastri what atonement he could make. 'The sacrifice of your life,' boldly replied the Shastri, 'is the only atonement.' The Shastri refused to stay in Poona if Raghunathray was at the head of affairs, left the city, and spent the rest of his life in retirement near Wai. Meanwhile the arrears of pay were discharged, Raghunathrav was released, and his adopted son Amritray, attended by Bajaba Purandhare was sent to Satara to bring the robes of office. Raghunathrav was proclaimed Peshwa. Haidar Ali of Maisur and Nizam Ali of Haidarabad lost little time in taking advantage of the disturbances at Poona. [Grant Duff's Marathas, 363.] Raghunathrav left Poona resolved to oppose Nizam Ali and cripple his power. Meanwhile the Poona ministers sent Gangabai the pregnant wife of Narayanrav to Purandhar and began to govern in her name. Negotiations were opened with Nizam Ali and Sabaji Bhonsla both of whom agreed to

support Gangabai, and a wide spread intrigue in Raghunathrav's camp was organised. When Raghunathrav heard of the revolt in Poona, he began to march towards the city. Haripant Phadke came from Poona to meet him the head of a division. On the 4th of March 1774 Raghunathrav met and defeated the ministers' troops near Pandharpur under Trimbakrav Mama. The news of this defeat filled Poona with alarm. The people packed their property and fled for safety to the villages and hill forts. [Grant Duff's Marathas, 367-368. I In 1776 the impostor Sadoba, who gave himself out as Sadashiv Chimnaji who had died at Panipat, was carried by Angria a prisoner to Poona, where he was bound to the foot of an elephant and trample to death. [Grant Duff's Marathas, 397 -398] In 1777 an agent of France was received at Poona with distinction, and the British envoy Mr. Mostyn was treated with studied coldness. In March 1777 several Frenchmen went by Cheul to Poona and early in May 1777 one of them St. Lubin was received in Poona as an ambassador from France. [Grant Duff's Marathas, 404. Grant Duff quotes an interesting letter regarding St. Lubin written from poona by Mr. Farmer of the Bombay Civil Service, 405 note 2.] In 1781 on the approach of General Goddard Poona houses were filled with straw and preparations made for taking the people to Satara. [Pennant's Views of Hindustan, 1.95.] In 1785 at Nana Fadnavis' desire Mr. Charles Malet was chosen to be British resident at Poona. [Grant Duff's Marathas, 468.] About this time Major Rennell describes Poona as meanly built, not large and defenceless. In case of invasion the officers retired to Purandhar eighteen miles to the south-east where the Government records, were kept and where many of the chief officers usually lived. This arrangement in Rennell's opinion greatly added to the strength of the Peshwa as he was free from the encumbrance of a great capital. [Memoir, 134.] On the 1 st of June 1790 a treaty was concluded at Poona for the suppression of Tipu between Mr. Malet on the part of the Company and Nana Fadnavis on the part of the Peshwa and Nizam Ali. [Grant Duff s Marathas, 484.] In August 1791 there was a curious outbreak of lawlessness at Poona. A party of merry Brahmans had separated rather late at night. Thirty-four of them remaining in the streets after the firing of the Bhamburda gun, [The Bhamburda gun was always fired at nine. It was a gun of large calibre and gave sufficient warning to all people to retire to their homes. After a reasonable time, the patrols took up and imprisoned very individual in the streets and took him before the city police superintendent or kotval. A story is told of a Peshwa having been thus taken up by the patrol. Sometimes the firing of the gun was delayed half an hour and sometimes an hour or more. Moor's Hindu Pantheon, 373.] were taken up by the police and placed in confinement. In the morning twenty-one of them were found dead and the rest scarcely alive. The popular clamour grew great against the police superintendent or kotval one Ghashiram, a Kanoja Brahman of Aurangabad whom Nana Fadnavis had raised at the cost of his daughter's honour. Though Ghashiram did not even know of their imprisonment until the morning when the catastrophe occurred, popular indignation rose to such a pitch that Ghashiram sought refuge in the Peshwa's palace. The Peshwa, yielding to his fears, gave up the unhappy man to the mob, headed by a number of Telang Brahmans the caste to which the sufferers belonged. Ghashiram was dragged with every species of indignity to his own mansion and reservoir, he was bound with a cord held, by a Mhar, and he was stoned to death by the Telang Brahmans. [Moor's Hindu Pantheon, 373; Grant Duffs Marathas, 550. Other accounts seem to show that Ghashiram had grossly misused his power and deserved his fate.]

In 1792 Captain Moor describes the neighbourhood of Poona as well watered by frequent streamlets (June 3-8) und adorned by groves and gardens of which the cypress was the chief ornament, he city was not very large, not covering more than two miles. It was fairly but neither elegantly nor handsomely built. The Peshwa's palace was handsome but hardly grand enough for a royal residence. Other houses were more elegant. There were large markets and a long street of English looking-glasses, globe-lamps, and other finery. In the Peshwa's foundries thirty-six to forty-two pounder guns were made. The police was said to be particularly efficient. On the north-west a bridge had been begun across the Mutha. But as two Peshwas who were interested in the work died it was stopped as unlucky. There was a wooden bridge further up in bad repair. [Narrative, 78,363-365.]. Sir Charles Malet's residence at the Sangam was one of the pleasantest in India. He had formerly lived in the city but was allowed to move to the point above the meeting of the Mutha and the Mula. When he came this spot was bare except a ruined temple. He and his staff at great expense built neat houses and had a beautiful garden watered from both rivers by aqueducts. It yielded all the country fruits, and excellent vines, and had thirty apple and peach trees which promised to be a great addition to the fruits of the Decean. He had a stud of forty or fifty noble Persian and Arab horses and several elephants [Narrative, 363-364].

In this year (1792) Poona witnessed the grand display of the Peshwa being robed as agent of the Emperor of Delhi. Mahadji Sindia, who was supreme at the Delhi court, came to Poona on the 11th of June with the deeds and robes of the hereditary office of Vakil-i-Mutlak or chief minister, whose hereditary deputy in North India was to be Sindia. Sindia pitched his camp near the Sangam, the place assigned by the Peshwa for the residence of the British envoy and his suite. Nana Fadnavis, who was jealous of Sindia, did all he could to prevent the Peshwa from accepting the titles and insignia brought from the Emperor. But Sindia persisted and the Raja of Satara gave the Peshwa formal leave to accept the honours. On the 21 st Sindia paid his respects to the Peshwa, carrying with him numberless rarities from North India. The following morning was fixed for the ceremony of investing the young prince with the title and dignity of Vakil-i-Mutlak, and Sindia spared no pains to make the investiture imposing. Poona had never seen so grand a display. A large suite of tents was pitched at a distance from Sindia's camp and the Peshwa proceeded towards them with the grandest display. At the further end of the tents a throne, meant to represent the Delhi throne, was raised and on it were displayed the imperial decree or farman, the khilat or the dress of investiture, and all the chief insignia. On approaching the throne the Peshwa made his obeisance thrice, placed 101 gold mohars as an offering or nasar, and took his seat on the left of the throne. Sindia's Persian secretary then read the imperial farmans, and among others, an edict forbidding the slaughter of bullocks and cows. The Peshwa then received the khilat, consisting of nine articles of dress, five superb ornaments of jewels and feathers, a sword and shield, a pen case, a seal and inkstand, end two royal fans of peacock's tails or morchals with a nalki, [A nalki is a sedan chair without a top and having four poles two behind and two before, never used but by emperors or persons of the highest rank.] a palkhi, [A palkhi is an open bedstead with a curved pole over it.] a horse and an elephant with six other elephants bearing the imperial standard, two crescents two stars, and the orders of the fish and of the sun. The Peshwa retired to an adjoining tent and returned clothed in the

imperial robes when lie resumed his seat; and Sindia and Nana Fadnavis and other officers of the Peshwa offered *nazars* of congratulation. When the Peshwa rose to return to the palace, Sindia and Phadke followed carrying the peacock fans and fanning him. He entered Poona seated in the *nalki*; the throng of people assembled to see the procession was very great; the pomp and grandeur displayed was beyond anything the people of Poona had seen, while the clang of thousands of musical instruments, the shouts of the populace, the volleys of musketry and salvos of cannon gave to the ceremony all the effect that Sindia desired. [Grant Duffs Marathas, 499 - 500.] Two years later (February 12th, 1794) Mahadji Sindia, after a sudden illness of three days, died at Vanavdi. His body was burned and over the ashes was built a tomb still known as Sindia's Chhatri (103). In 1795 Madhavrav the young Peshwa was upbraided by Nana Fadnavis for keeping a private correspondence with his cousin Bajiray, afterwards the last Peshwa who was then confined in Junnar. Overwhelmed with anger and grief he for days refused to leave his room. At the *Dasara* on the 22nd of October he appeared among his troops and in the evening received chiefs and ambassadors. But his spirit was wounded to despair, a fixed melancholy seized his mind, and on the morning of the 25th of October, he threw himself from a terrace in his palace, fractured two of his limbs, and was much wounded by the jet of a fountain on which he fell. He lived two days and died having particularly desired that Bajirav should succeed him. [Grant Duff's Marathas, 521.] On the 26th of May 1796, much against his will, Chimnaji the second son of Raghunathrav and brother of Bajirav was adopted by the widow of the late Peshwa and formally installed as Peshwa. [Grant Duff's Marathas, 524.] On the 4th of December of the same year Bajirav was installed as Peshwa Chimnaji's adoption being declared illegal. [Grant DufFs Marathas, 529.]

In the beginning of 1797 a desperate affray took place in the streets of Poona between a body of Arabs and a party of Maratha soldiers in which upwards of 100 persons were killed and many shops and houses were plundered. [Grant Duff's Marathas, 530.] On the 31st of December Nana Fadnavis, while returning a formal visit to Sindia, was seized by Michel Filoze a Neapolitan officer of Sindia's. On his word of honour Filoze had guaranteed Nana's return and his perfidy excited great indignation. Several persons of distinction who went with Nana were also seized and the rest of his retinue of about 1000 men were stripped, maimed, some of them killed, and the whole dispersed. Parties of soldiers were sent to plunder not only Nana's house but the houses of all his adherents, many of whom barricaded their doors and defended themselves from the roofs and windows. The city was as if taken by storm and firing continued the whole night and next day. The roads were stopped on every side; all was uproar, plunder, and bloodshed; the alarm was universal; friends marched together in groups with their shields on their arms and their swords in their hands. [Grant Duffs Marathas, 532.] In 1798, with the consent of Bajirav and Sindia, Sindia's Divan and father-in-law Sarjerav Ghatge so ferociously plundered Poona, that his name is still remembered with horror. Ghatge's first step was to raise money from the members of Nana's party who were confined in Bajirav's palace. These men of position and high reputation were dragged out and scourged till they gave up their property. One of them, a relation of Nana's, died tied to a heated gun. These cruelties were not confined to Nana's friends. Merchants, bankers, and all in the city who were supposed to have wealth were seized and tortured with such cruelty that several of

them died. Though the plan of levying money from the people of Poona was Bajirav's, he never supposed that the money would be collected with such cruelty. Bajirav remonstrated with Sindia but to no purpose. [Grant Duff's, Marathas, 533.] In the same year the Peshwa's troops, which were greatly in arrears, raised a tumult and kicked about the street the turban of one of Bajirav's favourites who tried to interfere. The tumult was quelled by Naropant the former commandant a friend of Nana's. This was followed in 1798 by a war between the widows of Mahadji Sindia who were living in Poona camp. Though Daulatrav Sindia, the nephew of Mahadji, had promised to make ample provision for them they found no provision made and even their comforts scrimped. The youngest widow was a beautiful woman and the others discovered or invented a criminal intimacy between her and Sindia. The ladies openly accused Sindia of incest and Ghatge, who was sent to quiet their complaints, being refused an entrance, forced his way into their tents and seized and flogged them. The Shenvi Brahmans, w ho, before Ghatge's rise to power, were the strongest party in Sindia's army, took the side of the widows and it was arranged that they should be sent to Burhanpur. [Grant Duffg Marathas, 538.] On their way to Burhanpur their friends learned that the widows were being taken not to Burhanpur but to Ahmadnagar fort. Under the influence of Shenvi officers a Pathan named Muzaffar Khan, who was in command of a choice body of cavalry, assailed the escort near Koregaon, afterwards the scene of Staunton's celebrated battle, rescued the widows, and carried them back close to Sindia's camp. Ghatge persuaded Sindia to let him attack Muzaffar. Muzaffar had warning and retired with the widows pursued by Ghatge. He left the ladies in the camp of Amritray, Bajiray's brother who was near the Bhima, turned on Ghatge, defeated him, and put him to flight. Bajiray, who is said to have instigated the whole, approved of his.brother's kindness to the widows and asked Colonel Palmer the British resident to mediate between them and Sindia. Sindia refused and on the night of the 7th of June sent Ghatge with five battalions of regular infantry under Du Prat a Frenchman, to surprise Amritrav's camp and seize the ladies. Ghatge's attempt failed and he had to retire with loss. Sindia then promised to arrange for a suitable establishment for the ladies, and Amritrav came into Poona and camped close to Sindia. It was the Muharram time, and Ghatge under pretence of keeping order brought two brigades of infantry and twenty-five guns close to Amritrav's camp, suddenly opened fire on it, charged and dispersed Amritrav's troops, and pillaged his camp. This outrage was nothing less than an attack on the Peshwa himself. Holkar came and sided with the Peshwa, the other Maratha nobles joined his standard, and the Peshwa negotiated an alliance with Niizam Ali. Sindia was alarmed by the treaty and brought Nana Fadnavis from Ahmadnagar and proposed to put him at the head of affairs. Meanwhile Ghatge had been acting with such cruelty that Sindia felt that Ghatge's disgraceful acts were alienating the minds of all his supporters. He accordingly gave orders for Ghatge's arrest which was successfully effected. Ghatge's arrest reconciled Sindia and Bajirav. In 1799 Sindia's widows fled to Kolhapur with the Shenvi Brahmans from Sindia's camp. Large bodies of horse flocked with them and when sufficiently strong they returned to the northward and not only insulted Sindia in his lines but stopped the roads near Poona. The country was wasted by swarms of horsemen. [Grant Duffs Marathas, 545.] Early in 1800 Nana Fadnavis died at Poona. This event sealed the fate of the Peshwa's government. Before the close of the year Yashvantrav Holkar obliged india to leave Poona, but before he left Poona Sindia forced Bajirav to give him bills worth £470,000 (47 lakhs). After Sindia left Poona Bajirav began to

distress and pillage all who had opposed himself or his father. One of the first who suffered was Madhavrav Rastia, whom he invited to visit him, and whom he seized and hurried to prison. This act followed by others like it caused great discontent in the city. Lawlessness spread and the country was filled by bands of plundering horsemen. Among the prisoners taken in one affray was vithoji the brother of Yashvantrav Holkar, whom Bajirav ordered to be tied to an elephant's foot and dragged in the streets of Poona (April 1801).

Colonel Welsh, 1801.

About this time Colonel Welsh describes Poona as about three miles long and two broad with 140,000 houses and 600,000 people. The streets were extremely narrow and full of markets with innumerable articles of merchandise, the produce of India China and Europe. The houses some three or four storeys high were built without much regard to taste or symmetry though being diversified in size shape and colour they had a pretty appearance from a distance. The view from the opposite side of the river was most imposing, as that part of the town which was washed by the stream, being faced with stone descending in many parts by regular steps to the water's edge and having trees intermingled with the houses, presented an appearance very far from despicable, though a stranger set down in the streets could hardly credit the assertion. The fruit markets were well supplied with musk and water melons, plantains, figs, dates, raisins, mangoes, pomegranates, woodapples, almonds, and a great variety of country vegetables. In short it appeared a place of great wealth in which centred the entire trade of the empire. [Welsh quoted in Maxwell's Life of Wellington (1839), L 122.] Of Poona at this time and during the reign of Bajirav, Captain Robertson the first Collector wrote in 1825. Poona was then a gay rich and busy city. The wealthy governors and revenue officers of Guiarat and Karnatak, wherever they made their money, spent it in Poona on marriages, feasts, and a numerous retinue of Maratha servants and dependants. Vast wealth flowed into Poona from other causes, the intrigues of foreign powers, and the deference shown to the Peshwa by the Maratha leaders. The city was bright with bands of armed men, handsome horses, rich palanquins, and gorgeous elephants, messengers ran from place to place, all was gay with sports, dances, and merrymaking. [Capt. Robertson, 1st Feb. 1825. Bombay, Rev. Rec. 117 of 1825, 533-534.] In 1802 Ghatge came to Poona and made demands for money from the Peshwa. Bajirav called him to his palace, but Ghatge, suspecting treachery, forced his way out, leapt on a horse, escaped, and returned to Poona with a force threatening to attack the city. The British Resident was called in to settle Ghatge's claim and Poona was saved further loss by an urgent message from Sindia requiring Ghatge in Malwa. Meantime Yashvantrav Holkar, who was burning to avenge his brother Vithoji's disgraceful death, was marching towards Poona. Sindia's army joined the Peshwa's and took a position close to Poona near the present cantonment. Bajiray ordered Yashvantrav to retire but he refused to obey. On the morning of the 25th of October the two armies met, and, after a well' contested fight, the battle ended in a complete victory for Holkar. Bajirav making sure of victory came to see the battle, bat the firing frightened him, and on learning the fate of the battle he fled to Sinhgad. For some days after his victory Yashvantrav showed great moderation at Poona. He placed guards to protect the city, treated Bajirav's dependants with kindness, and made several

attempts to persuade Bajirav to come back. But Bajirav fled to the Konkan. When Holkar heard of Bajiravs flight he levied a contribution from the people of Poona. The contribution was arranged by two of Bajirav's officers and it was carried out in an orderly manner. But it was followed by a plunder of the city as complete and as wickedly cruel as Sindia's plunder in 1798. The loss of property was unusually severe as guards had been set to prevent people leaving Poona. Meantime Bajirav had signed the treaty of Bassein and General Wellesley was on his way to reestablish Bajirav in Poona. Near Baramati, on the 19th of April 1803, General Wellesley learnt that Bajirav's brother Amritrav was likely to burn the city to prevent this misfortune. General Wellesley pressed on and used such speed that, though kept six hours in the Little Bor pass, he reached Poona on the 20th of April a march of sixty miles in thirty-two hours. [Wellington's Despatches, II. 102.] Of the state of money matters in Poona General Wellesley wrote: 'I have drawn in favour of a savkar at Poona who promises to pay one lakh of rupees a month. However, from the Peshwa down to the lowest cooly in the bazar, there is not a Maratha on whom it is possible to rely that he will perform any engagement into which he enters, unless urged to the performance by his fears. I doubt therefore this savkar.' [Wellington's Despatches, II. 102.1

Lord Valentia, 1803.

In October 1803 the English traveller **Lord Valentia** describes Poona as an indifferent town, with several large houses built with square blocks of granite to about fourteen feet from the ground. The upper part was a framework of timber with slight, walls merely to keep out the wet and air. The lime bricks and tiles were so bad that the rain washed away any building that did not depend on timber for its support. Timber was brought in abundance from the hills to the west and was not much dearer than at Madras. Holkar's stay did not improve the town. He pulled down several large houses in search of treasure and it was said that he found much. Lord Valentia forded the river both going and returning; the foundations of a granite bridge rose above the water, but they were laid in misfortune and superstition would not allow their completion. A bridge of boats had been laid across by General Wellesley but was not kept up. [Valencia's Travels, II. 115.]

Lord Valentia described Colonel Close's residence at the Sangam as a charming spot, adorned with cypress and fruit trees and with a handsome bungalow. [Travels, II. 123.] When (1792) Sir Charles Malet first came as Resident he was obliged to live in a wretched house in the town, and during the summer had to pitch his tents on the banks of the river. Remonstrances at length gained him leave to build a temporary house in the Sangam garden. It was burnt down and Sir Charles was allowed to build the existing bungalow. Still no fence was allowed and Colonel Close had great difficulty in getting leave to make a gateway and some additional buildings. The natives burnt their dead on the opposite bank. At four in the afternoon of the 14th of October a deputation from the Court, the highest compliment the Peshwa could pay, came to the opposite side of the river from the Sangam and Lord Valentia, accompanied by Colonel Close and their suites, set off. At starting a salute was fired. The Peshwa's minister for British affairs and the under minister, attended by a large body of horse and some foot soldiers, led the procession, and were joined by an escort of British infantry. In the place before the palace

were drawn out the Peshwa's cavalry and infantry guard and his elephants, by no means a splendid body. Kettledrums were beating, the servants were all at their posts, and the crowd was considerable. Lord Valentia waited a few seconds at the door till Sadashiv Mankeshvar the minister had come near. He then left his slippers, and with Colonel Close supporting his left arm, stepped on the white cloth with which the floor was covered. He embraced the minister and presented the officers of his suite. The Peshwa entered the room and stepped on his cushion or gadi. Lord Valentia hastened towards him supported by the Colonel on his left and the minister on his right. His Highness continued standing and slightly embraced Lord Valentia with his right hand. Lord Valentia was next presented to the Peshwa's brother who was on the right and who also embraced him. Lord Valentia then returned and presented to the Peshwa the gentlemen of his suite who were also embraced. They then sat down. The minister was next His Highness on the left, but rather behind. Lord Valentia was near to him. Next to Lord Valentia was Colonel Close and then the other European gentlemen. They had no chairs or cushions and were not allowed to put out their feet, as to show the sole was disrespectful. His Highness wore no slippers. The etiquette of the Court was silence and when anything was said it was in a low whisper. Lord Valentia spoke to Colonel Close, who translated it to the minister, the minister stretched himself out towards His Highness on his knees with his hands closed and raised, and, in a low voice, reported what Lord Valentia had said. By the same conveyance the answer was returned. Lord Valentia first asked after His Highness's health and was told that he was well, and that he hoped Lord Valentia had arrived in good health. Lord Valentia then asked after the health of the Peshwa's brother. The message was carried across the room, in front of the cushion by Anandrav. The answer was complimentary. Then through the minister His Highness expressed a wish that the party might retire into a more private place that conversation might be freer. Lord Valentia immediately arose and followed the Peshwa into a very small room attended by Colonel Close, the minister of the state, the under minister, and the minister of British affairs. His Highness seated himself on a small Turkey carpet in the corner of the room. He placed Lord Valentia next him on his left and the rest formed a part of a circle in front of him. The Peshwa then begana very interesting conversation in which he considerably relaxed from his etiquette, smiled, and frequently spoke immediately from himself to Lord Valentia and Colonel Close. With all the disadvantages of interpretation, Lord Valentia could perceive that the Peshwa gave a very elegant turn to the expressions he used. Among many other compliments the Peshwa expressed a wish to give Lord Valentia a fete at his country house. To this Lord Valentia with pleasure agreed. This fete had been previously arranged and was to take place after the Peshwa had honoured Lord Valentia with a visit. On political subjects the Peshwa spoke fully and clearly and seemed much better informed than Lord Valentia had reason to expect. After about an hour the party returned to the Darbar. Lord Valentia was so extremely tired with his position that it was with some difficulty he could, rise and for a few minutes was obliged to rest against the wall. No conversation passed after the Peshwa was seated on the cushion. Betel leaves were placed before him in a large gold plate; on the top was a gold box containing a parcel of the same; attar, rosewater, and spices were is the same line. Anandrav, the minister for British affairs, gave rosewater, attar, and spices to Colonel Close; to Lord Valentia he gave attar and rosewater. The party then rose, and His Highness' with his own hand presented Lord Valentia with the gold box filled with the betel leaves. The

guests then made their salutations and retired, the ministers attending them to the door. The Peshwa and his brother were in plain white muslin dresses without a single jewel. The minister had some handsome flat diamonds in his turban, a neck-lace of emeralds and large pearls, and earrings of gold from which hung the finest pearls Lord Valentia had ever seen. They were perfectly round and clear and were as large as the pupil of the eye. The palace was a fairly handsome building and was very clean. The Darbar-room was large, and was supported by handsomely carved wooden pillars. The state cushion was of white muslin richly embroidered in gold and coloured silk. With the exception of a few who carried silver sticks the Peshwa's attendants stood round outside of the pillars. Holkar had not done much harm to the palace but he had carried away everything movable, including a small armoury and the elephant cars. Lord Valentia thought Poona well placed and that when it had enjoyed a little rest, it would be a handsome capital. On the 16th, to receive the Peshwa, Colonel Close pitched a large tent in front of his house and two tents joined to it without sides so that they formed one very large room. The state cushion was sent forward and placed in the centre as at the Peshwa's own Darbar. When the Peshwa came in sight Colonel Close mounted an elephant and advanced to meet him. Lord Valentia waited his approach at the door of the tent. The Peshwa came close up, but did not dismount till the minister, the under minister, and the minister for British affairs had paid their compliments and had presented to Lord Valentia the different nobles and honourables who attended him. They made their salutations and passed into the tent. His Highness then descended from his elephant along with his brother, who rode behind him. Lord Valentia made his compliments and leaving a space on his right hand for the Peshwa to walk in moved into the tent. All seated themselves as at the Darbar. After a few compliments and while the dancing girls were singing and dancing, betel leaf and attar were placed on the ground before His Highness and he ordered them to be given to the sardars and other attendants. Lord Valentia then asked His Highness to allow him to robe the Peshwa and his Brother. The Peshwa granted leave and the trays were brought forward and laid before them. Lord Valentia rose and passing in front of the state cushion began with the Peshwa's brother. A jewelled crest and other ornaments were set in his headdress and a necklace of pearls with a pendant of coloured jewels was fastened round his neck. The Peshwa's headdress and his neck were then adorned with jewels and in addition his wrists were encircled with diamond bracelets. He had a telescope, and a sweetmeat box, ornamented with a beautiful picture of the goddess Ganga. His brother had a sweetmeat box with Indra painted on it. The figures were appropriate to their character. His Highness was much attached to the ladies. His brother was grave and ceremonious. Lord Valentia then gave betel leaves and attar; the attar was poured into Lord Valentia's hands, who gently rubbed it down both the shoulders of the Peshwa; this was done at the Peshwa's request, and was the highest compliment. His Highness was in such excellent humour, that, though it was a public visit of ceremony, he frequently smiled and addressed himself to Lord Valentia and to Colonel Close. The ministers did not receive the attar as it was Lord Valentia's wish that they should stay after the rest were gone. There was great jealousy, between the ministers and the Mankaris so that to have made the ministers presents in the company of the Mankaris would have been an insult to their dignity. Lord Valentia mentioned to the ministers that a horse and elephant were at the gate as presents to His Highness. These were always given on state occasions but without being habited as was the practice in other courts. It was nearly dark before

the Peshwa left. The ministers stayed a short time and received Present according to their rank, the jewels being tied by Colonel Close's. Native Assistant. They then received betel leaf and attar froms Lord Valentia's hands and departed. The presents were provided by the East India Company. His Highness' were worth about £1200 (Rs. 12000), the others; altogether nearly £800 (Rs. 800). The nach girls had sung son very interesting Marathi or as they call them Deccani songs, which Lord Valentia's party now made them repeat as a relaxation from the fatigue of a state visit. Lord Valentia afterwards learnt that on this day there was a great religious festival at which His Highness ought to have assisted and that he was fined several hundred rupees for his absence. This provided a handsome fast for the Brahmans. At night Parvati's temple was covered with lights. On the 20th a little after four, Lord Valentia set off with the usual retinue to pay a visit to the Peshwa at his country house the His Bag. The road was for a considerable distance covered by his Highness' followers, chiefly horsemen, so that it was rather difficult to get to the gates. Fortunately Lord Valentia had a party of sepoys from the lines who joined on the opposite bank of the river, and made way for him. The Hira Bag was prettily placed on the bank of a large lake perfectly irregular in its shape. In the centre of the lake was a small island with a temple. The opposite bank rose into a sugarloaf hill whose top was capped by the white buildings of Parvati's temple. The garden house was insignificant and had never been finished. The garden was fine and was ornamented with several mar go trees and a great number of cocoa palms. The cushion was placed in a veranda opening on a basin of water with fountains and covered by a trellis of vines. Lord Valentia brought His Highness news of the surrender of Chandor fort to the umited army of the British and the Peshwa. His Highness was in great spirits and observed that his father always wished for the friendship of the English but that it had remained for him to reap the blessings of it. The Peshwa then asked Lord Valentia if he would procure for him an Arab mare and Colonel close assured him that he would try his best. The ceremony at Lord Valentia's entrance was the same as on the former occasion and he was seated in a similar situation. The party soon had notice to move upstairs: the Peshwa passing through a back door, while the guests mounted by a narrow staircase to a platform with two verandas one at each end. In the farther veranda a white cloth was spread with plantain leaves one for each of the English gentlemen present. On each leaf was a Brahman's dinner, rice plain and sweet, pastry thin as paper and rolled up, pastry cakes, bread and peas pudding. Along one side was a row of sweets like paints on a pallet; on the other were seven different kinds of curried vegetables. On one side of the leaf were rice-milk, clarified butter, and some other liquids in small plantain leaf pans, which were all excellent of their kind. The guests had taken the precaution to bring spoons knives and forks which they used actively out of respect to their host who soon joined the party by seating himself on the cushion a little on the outside of the veranda. When the guests had finished the Peshwa retired and the guests soon followed. After the guests had seated themselves below betel leaf was laid at the Peshwa's feet and served. Lord Valentia's servant had placed himself at the bottom of the line, and was consequently served first. They proceeded upwards till they reached Lord Valentia, where they stopped. The presents were then brought in again beginning with Lord Valentia's servant. They consisted of a pair of shawls, a piece of brocade, and a piece of cloth; the whole worth about £20 (Rs. 200). There was no visible difference between these and other presented to Messrs, Young, Sail, Murray, and Smith. The gentlemen of

the establishment were totally overlooked. Lord Valentia's presents were then brought forward which consisted of the same articles and a piece of muslin. There were also jewels in a tray: these were put on by the minister which had answered every purpose of a turban, the *shirpech*, *jiggar*, and *tura* looking better on a native dress. All the presents were better than had ever been given on a former occasion, the shawls being new and good ones for this part of India. A horse and elephant were at the door. The horse was a fine animal and in good condition, a most unusual circumstance at Poona. The attar was given to Lord Valentia and Colonel Close by the minister. The box of betel leaf was delivered by His Highness himself. After this was over a sword was given into the Peshwa's hands and by him presented to Lord Valentia. It was handsomely mounted in green and gold and had a very fine blade. The sword was not part of the real gifts of the ceremony and Lord Valentia therefore valued it the more, assured the Peshwa that he would hand it down to his son and his son's son, and kept it by him instead of delivering it to his servants as he had done the trays. The *nach* girls were the same as on the Peshwa's visit to Lord Valentia. The Peshwa's own dancing girl was rather old but was said to have a fine voice. She was too busy in performing before the deities during that season of festivity the *Dasara* to attend Lord Valentia and his party. A few compliments passed at taking leave and the Peshwa paid Lord Valentia the unusual compliment of requesting to hear of his welfare. The minister attended the party as far as the end of the carpet and then took his leave. Lord Valentia's party returned through the town which was much larger than he had expected and the market much finer. There were several large houses, three storeys high; the temples were insignificant; the number of wretched objects was small. [Valentia's Travels II 113 -125. The wretched objects refered to by Lord Valentia were the poor famine-stricken people.]

Sir J. Mackintosh, 1805-1808

In 1805 Sir James Mackintosh the Recorder or Chief Justice of Bombay went on a visit to Poona. He found the chief streets of the city paved with stone and the city regarded as one of the best built native towns in India. The Peshwa's residence the Saturday Palace or Shanvar Vada (32) from its size well deserved the name of a palace. [Mackintosh's Life I.274.] On the 10th of November 1808 Sir James Mackintosh paid a second visit to Poona. He learnt from Colonel Close the Resident that Poona had a population of about a hundred thousand. The police was entrusted to a military Brahman of the family of Gokhle who had a large establishment and whose duty was either so easy or so well performed that notwithstanding the frequent meeting of armed men instanes of disorder were rare. [Life, I. 460.] In 1813 a brigade of British troops was stationed at Poona near Garpir (68), a spot originally chosen by General Wellesley to guard the city. In 1816 the unknown author of a Fiteen Years in India described Poona as of modern build and not of any great extent nor imposing in appearance. The city lay in a garden-like plain with fine mountain scenery in the distance. Covering the city was a hight mountain range with several romantic hill forts in sight and near the city walls was the round and steep Parvati hill. It was well watered by the Mula and Mutha which met near the city. The streets were broader in general than in other native towns and showed vast wealth. The city had several temples but they were modern and not held in great veneration. In point of strength the city was not worth much consideration, but its wealth and its Brahman

government gave it an importance among Maratha states. [Fifteen Years in India, 450-451.] In a letter to Lady Keith (27th November 1816)

Mr. Elphinstone, 1816.

Mr. Elphinstone gives a livelier picture of the sights of Poona, or rather of the part of Poona close to the Sangam. I am writing, he says, in a garden of trees some of which have no names in English and others are among the rarest in your green houses. My room is filled with the smoke of incense burnt before a Hindu god not ten yards from my house, where troops of women come, with music playing before them, to hang garlands, to sacrifice sheep, and to cut off their own hair, which they have vowed to to the divinity. In the same garden there is a very ancient ruined tomb of a Muhammadan female saint, which is a place of such sanctity that an oath taken in it is reckoned sacred, even among the faithless people. I have just heard loud, lamentations over a dead body and I now see a funeral pyre kindling on the banks of a river close at hand, where I have before seen the living consumed with the deal. The mourners are sitting in silence on the ground looking on till it be time to gather up the ashes of their friend. Two large elephants are wallowing in the water at no great distance, and on the road that crosses the river are buffaloes, camels, horsemen with long spears and loose drapery, and foot passengers male and female in dresses of all sorts and colours. At this moment a procession is passing of Muhammadans dressed like Arabs, performing a frantic dance and flourishing their drawn swords in honour of the sons of Alli of whose martyrdom this is the anniversary. The whole town is ringing with drumming trumpeting and shouting, occasioned by the same festival, and to make the whole still more unlike England the country round is laid waste by a body of predatory horse, who have made an inroad from beyond the Narbada, and have drive the inhabitants of the neighbouring villages in on the capital. [Cole brooke's Elphinstone, I. 343.] On the 13th of June 1817 the treaty of Poona was drawn up by Elphinstone and signed by Bajirav Peshwa. [The terms of the treaty of Poona are given in Part II. p. 297.] On the 14th of October Mr, Elphinstone and Bajirav met for the last time. Bajirav spoke of the lose he suffered under the treaty of Poona. Mr. Elphinstone told him that his only chance of regaining the goodwill of the English was to lose no time in sending his troops north to aid the English in putting down the Pendharis. Bajirav assured him that his troops would start as soon as the Dasara was over. Dasara Day fell on the 18th of October. It was the finest military spectacle in Poona since the accession of Bajirav. Every day of the week after Dasara (19th - 25th) became more interesting. By night and day parties of armed men kept flocking into Poona from all sides. The British troops were cantoned to the north of the town in a position originally chosen by General Wellesley for the protection of the city. Gardens and enclosures with high prickly-pear hedges ran in many places within musket-shot of the lines, affording not only every advantage for the attack of the Arabs and irregulars, but, in case of disaffection among the sepoys, every facility to desert. Small parties of horse came out and encamped round the British cantonment, and in a few days more were augmented to large bodies, while a strong body of Gosavi infantry took a position on one of the flanks. The Sangam being at some distance from the cantonment the Vinchurkar's horse with some infantry and guns encamped between the Residency and the village of Bhamburda. Besides these preparations all reports showed that an attack was immediate. The Peshwa was urged to

strike before reinforcements could reach Mr. Elphinstone. On the night of the 28th October the guns were yoked, the horses saddled, and the infantry ready to surprise the British lines. Next day (29th October) Mr. Elphinstone complained to the Peshwa of the crowding of the Maratha troops on the British lines. At four in the afternoon of the 30th of October the European regiment, after great exertions, reached the cantonment. With the exception of 250 men left to guard the residency, Mr. Elphinstone, on the 1st of Nov. moved the troops to a good position at Kirkee four miles north of Poona. The British cantonment was plundered and events culminated on the 5th of November 1817 in the battle of Kirkee when 2800 British troops signally defeated a Maratha host of 33,000. [Details of the battle of Kirkee are given above pp. 374 - 381.] The residency was sacked and burnt on this day, and all Mr. Elphinstone's property, manuscripts, and oriental curiosities, valued at upwards of £8000 (Rs. 80,000), were either plundered or consumed. Poona city, left with only a small garrison, was surrendered on the 17th of November and the British flag was hoisted on the palace under a royal salute. [Fifteen Years in India, 486.] The greatest care was taken to protect the town people and order and peace were soon established. [Many outrageous acts on British officers and soldiers had raised indignation to the highest pitch and Mr. Elphinstone and General Smith found it very difficult, almost impossible, to save Poona from the sack for which the soldiery were eager. The British banker successfully solicited protection for the bankers and merchants, and guards were also posted at the chief public offices and the Peshwa's palace, Some trifling excesses were committed in the suburbs, but the city suffered no injury and the loss of property was insignificant. Considering all circumstances the forbearance of the troops deserved high praise. Colebrookes Elphinstone, I. 4,] But many of the people especially jewellers and pearl merchants, who had fled to Sinhgad, suffered. [Grant Duffs Marathas, 655; Fifteen Years in India, 490.] Details of Artillery and Pioneers, one regiment of Light Cavalry, one European regiment, and three battalions of Bombay Native Infantry, were placed in the city and cantonment. [Blacker's Maratha War, 315-16.] In 1819 Mr. Elphinstone detected a conspiracy in Poona in which men of desperate fortunes, some of them Brahmans, took a lead. The object of the conspiracy was to murder the Europeans at Poona and Satara, to surprise the chief forts, and to take hold of the person of the Satara Raja. Mr. Elphinstone met the conspiracy with promptitude and ordered the ringleaders to be blown from guns remarking ' that the punishment contained two valuable elements of capital punishment, it was painless to the criminal and terrible to the beholder' [Colebropke's Elphinstone, II 74 75,]

Capt. Robertson, 1821-1825.

Captain Robertson the first Collector of Poona writes 'the fall of the Peshwa was a great loss to Poona. Into the city had flowed large sums not only from the tributary states but also from the surrounding districts. Though Bajirav himself was fond of hoarding his money, among his courtiers and his military officers there were many who received large sums in bribes and freely spent what they made. The stoppage of war over the whole of India closed to the bankers their favourite and most profitable investments and there were no other channels into which their wealth could be tumed. With the end of the gaiety and richness of Bajirav's court the demand for the rich; silks and tissues of gold, which had vied with the produce of Paithan, ceased, and the dealers and weavers were

impoverished. The poorer of the *mutsaddis* suffered severely. Some moved to smaller towns where living was cheaper, others took to husbandry or retired to their homes in the Konkan, others entered Government service; about twenty-five of them were employed in mamlatdars' office, and at the civil court. A considerable number (about 600 in all), of whom about 400 were Musalmans and 200 Marathas, men to indolent habits who refused all work but fighting went idly about Poona, and lived in brothels and were often indebted for a meal to the keepers of brothels,[10th October 1821; East India Papers, IV. 588, 594.] others continued to hang about in the city for years, hoping for-military service, and their growing poverty was turned to distress by the high prices of grain which followed the years of scanty rainfall ending in 1825. In 1825 instead of its old bustle and gaiety the city presented the tameness of poverty; the people led aimless idle lives without employment and without an object. Scarcely a horse passed along the listless streets which were empty except for starving tailors and better fed butter dealers.[1st February 1825; Bom. Gov. Rev. Rec. 117 of 1825, 533 - 534]

Hamilton, 1820.

In 1820 according to Hamilton, Poona had a population of 150,000. It covered probably not more than two square miles, was *Bishop Heber*,1825 indifferently built and wholly open and defence less, more like a large village than a city. [Hamilton's Description of Hindustan, 196.]

Bishop Heber, 1825.

In 1825 (27th June) Bishop Heber describes Poona as lying in the centre of an extensive plain, about 2000 feet above the sea, surrounded by singularly scarped trap hills from 1500 to 2000 feet higher. The plain was very bare of trees, and though there were some gardens close to the city, they were not sufficient to interrupt the nakedness of the picture, any more than the few young trees and ornamental shrubs of the cantonment. The most pleasing feature was the small insulated hill of Parvati. The city was far from handsome and of no great apparent size, though it was said to have a population of 100,000. It was without walls or fort, it was irregularly built and paved, with mean bazars, it had deep ruinous streets interspersed with *pipal* trees and many small but no large or striking temples, and as few traces as can well be conceived of having been so lately the residence of a powerful sovereign. Bishop Heber found the chief palace large with a handsome quadrangle surrounded by cloisters of carved wooden pillars. Externally it was mean, as were also the smaller residences which were whimsically known by the names, of the week. The ground floor of the chief palace was used as a prison, and the upper storey as a dispensary and an insane hospital. [Journal, II, 208 209.]

Jacquemont, 1832.

In 1832 the French traveller and botanist Jacquemont, a sharp but ill-tempered observer, described Poona as a large city very dirty and ill built. Nothing bore witness to its former greatness. Of the 50,000 inhabitants only a few were Musalmans. There were very many Brahmans, and many temples but none remarkable. The Brahmans lived almost all as

priests and beggars, very few went into the army. The population was much mixed with Konkanis Gujaratis and Deccanis, and there were Marwari merchants and Bohoras. There were no Parsis in the city, but Parsis had a monopoly of the market in the camp. The people were small and very black, their features had none of the classic regularity of Hindustan, but they were shrewd and sharp, the expression hard but not unpleasant. The lowest classes wore a narrow girdle and a black or red turban. The better-off had a waistcloth or an open shirt. Each caste had a different form of headdress generally ungraceful, coming low in front and behind and high over the ear so as to show the earrings. Almost all women wore silver toerings and had their arms covered with silver, copper, ivory, or lacquered bracelets. The people lived on rice, wheat, and the flour of grains. Wood was extremely rare and dear and the dung of cows as well as of horses was the universal fuel. The streets were very dirty, and in the morning were throughd with men and women. On Parvati, near the temple, were the ruins of the Peshwa's palace, and great mango groves stretched at the foot of Parvati towards the Mutha and surrounded the city to the south. But the trees were wretched and vegetation had no strength except on the river side. From the hill top Poona looked a mixture of huts and trees such as *pipals*, bors, and babhuls, with a few cocoanuts. There were two wooden bridges, one built by the Marathas and the other by the English. [Voyage Dans 1' Inde, III. 554.]

1832-1884.

During the fifty years since 1832 Poona has advanced more perhaps than any of the leading towns of this presidency except Bombay. No notices or details regarding the city have been traced, but from what is known of the former condition of the district it probably made no rapid progress before 1850. During the 1857 mutinies there were signs of disloyalty and sedition, but the strong body of European troops prevented any attempt at an outbreak. Since the opening of the railway in 1860 the trade and prosperity of Poona has rapidly increased. The making of the railway, the American war, and the building of the barracks, and most of the leading public buildings between 1860 and 1870, added very greatly to the wealth of the city. This was followed by a time of depression which was at its height during the 1876-77 famine. Even during the famine many classes of townspeople shared in the profits which were made in the great trade in grain. In 1879 the opening of the Khadakvasla water works rapidly restored those of the lundholding classes who had suffered from the famine, and has turned into gardens large tracts round the city which were formerly bare waste. In 1879 (May 13) Poona was disturbed by the burning of the Budhvar palace and the attempt to burn the Vishrambag palace. Both fires were the work of incendiaries, and seem to have been prompted by a wish to cause loss and annoyance to Government and to increase the feelings of uneasiness which the gang robberies carried on by the openly disloyal Vasudev Balvant Phadke had caused. Since 1879 the progress of the city has been steady. The making of the West Deccan Railway, though it may deprive Poona of some of its present branches of trade, will do much to enrich it and to increase its importance as the chief trade centre in the Bombay Deccan. The growth of Poona is shown in the increase in the number of its people. The total in 1851 was 73,219. By 1872 this had risen to 90,436, and to 99,421 in 1881.

PUR.

Pur, a small village six miles south-west of Sasvad, with in 1881 a population of 531, has two temples of Kalbhairav and Narayaneshvar with a yearly fair at each. The fair at Kalbhairav's temple is held on the full-moon of *Magh* or January-February and the fair at Narayaneshvar's temple on the dark thirteenth of the same month.

Pur a small village of 182 people, pleasantly situated in a deep valley surrounded by hills, about twelve miles west of Junnar, has at the source of the Kukdi, a ruined Hemadpanti temple of Kukdeshvar covered by a tiled roof. [The antiquarian parts in this account are by Dr. Bhagvanlal Indraji, Hon. Mem. Roy. As, Soc, of Great Britain and Ireland.]

In going west from Junnar to Ghatghar up the valley of the Kukdi, a pleasant afternoon's work is to leave horses or a pony cart at the village of Hirdi, and to pass south over the east shoulder of the Kukdeshvar Temple. great scarped head of Shambhu hill, about three miles south-west to Kukdeshvar temple, and then, about four miles north-west across the west shoulder of Shambhu hill, over the low plateaus at the side of the Valley to Ghatghar. The country throughout is wild and picturesque. The path lies across the wooded banks of the Kukdi over a rising ground fairly clothed with young ain and other forest trees between the two great scarps of Shambhu on the right and Chavand on the left, into the wild valley of the Kukdi with some rice fields, but chiefly upland slopes broken with trees and thickly wooded in the deeper hollows. The path passes west with the mighty crags of Shambhu to the north, the lower wooded slopes of the Shiroli or Kumbai hills to the south, and the steep lofty sides of Mehendola and Shivdola to the west, and north-west. Near the head of the valley, which has narrowed into a woody glen, close to the right or south bank of the narrow rocky Kukdi is the old temple of Kukdeshvar. It is hid in the deep shade of a rich grove of mango and karanj trees. The spire is gone but the outer walls which had fallen or been overturned have been roughly put together, probably by the Marathas, and are sheltered by a strong thatched roof. Along the bank of the stream and in some walls to the east are many stones, some of them finely carved, and further down the stream is a small cistern cut in the rock. The temple is in the old Hindu or Hemadpanti manycornered style, later than the Ambarnath temple near Kalyan in Thana, varying from the eleventh to the early years of the thirteenth century. It stands on a modern plinth about fiftytwo feet east and west by thirty feet north and south, and one foot four inches high. The veranda or passage between the walls of the temple and the edge of the plinth is about six feet wide. The temple measures about forty feet long by eighteen broad. The original outline of the shrine and the hall or mandap is preserved, the four lowest feet of the wall all round the whole temple having escaped overthrow or decay. In the shrine, especially in the south face to the top of the present building, that is to about twelve feet from the ground, the stones remain in their original position. In the north face of the hall, above the line of four feet from the ground, the stones have been replaced in great disorder, many of the most richly carved stones, those for example with a water pot of the khujashape, properly belonging to the ruined spire. The shrine has three faces, to the north, the east, and the south, each face about four feet broad. Between these faces are two main corners to the north-east and the south-east and between the main corners and the faces is a single minor corner. In each of the three

main faces is a niche, the north niche containing a figure of the skeleton goddess Chamunda dancing on a corpse, and the east face of Shiv dancing the Tandav. The south face is at present (Dec. 1882) hidden by a heap of wooden rafters. In the outer face of the south passage, between the hall and the shrine, is some writing apparently mason marks, consisting of a few letters whose form points to some time later than the inscription (A.D. 1060) in the Ambarnath temple near Kalyan in Thana. The prancing figure in the niche in the south face of the hall is Vishnu in the Varah or Boar form, with a mace in his right hand crushing the demon Hiranyaksh under his foot. In the west wall are two niches. The niche to the south of the door has a figure of Granpati and the niche to the north of the door is empty. On the ground the left or north niche below has a figure covered with redlead of Har-Gauri that is Shiv with Parvati in his lap. In the north wall are some groups of goddesses and attendants, but the niche has been lost and its place taken by a spire stone of a *khuja*shaped water vessel which is marked with redlead.

In the north-west corner of the plinth of the temple is a small broken shrine and on either side are two terrific skeleton Bhairavs with scalps and spear, and a little to the west a cobra stone or Nagoba and a pillar carved in relief. To the right is a small broken shrine of Bhairav of plain but well dressed masonry. The left Bhairav is in its right place, but the right figure has been moved. Inside the temple in the shrine lies a stone carved in the lotus pattern which the people worship. Facing the temple door are some ruins probably of a monastery. To the south is a sun and moon stone with the ass curse but no writing. To the east are many spire stones.

About six feet in front of the west door is a broken bull with well carved bell necklace. The pilasters and jambs on each side of the west door are in their original places and the door is in its original breadth (2' 9"), but the lintel has been changed and the proper height of the door cannot be fixed. The stone with a modern figure over the lintel is also out of its place.

Inside the temple is in good repair. It includes a hall 12' 5" long by 13' 4" broad, a passage to the shrine 6' long by 7' broad, and a shrine 6' 9" square. The roof of each of these three parts is domed in the Hemadpanti or cross-corner style. The roof of the hall and the passage is supported by four pillars and twelve pilasters. The four pillars uphold the hall dome. Of the twelve pilasters four uphold the dome over the passage to the shrine, four are in the side walls of the hall, and four are in the corners of the hall. A fifth pillar has been set in the middle of the hall face of the shrine passage to hold up one of the cross slabs of the dome which is badly cracked. The hall dome is about 5' 7" square, 10' 2" high to the top of the bracket capitals and 3' 8" more to the centre of the dome. The inner part of the dome is plain except the central stone which is carved in the hanging lotus pattern. The four pillars which support the dome stand 5' 7" apart. In the side walls, between each face of pilasters, are two central niches (3' 1" by 6') with a figure of Har-Gauri that is Shiv with Parvati on his lap in the south niche, a four-handed Kali in the north niche, and pilasters in the corners. Standing on the. floor in the north-east corner are three figures of Har-Gauri and. one of Vishnu. All the pillars and pilasters are richly carved and are about 10' 2" high to the top of the heavy bracket capitals. [The details of the pillars are a square base 1'9" and 4" thick, a four-sided shaft 1'10" long with faces

about 1' 3" broad; an eight-sided band 4" broad; a circular fillet 2"; an eight-sided belt 3½"; another round fillet 2"; a four-sided block 9'. high with faces 1' 2½" broad; an eight-sided band 1' broad; a round band 11"; and above three sharp circles the two lowest like discs, and the third with a row of hanging ornament together about 1' broad; then a square capital of 4"; and above the square capital, a bracket capital with four separate faces about 1' 2" broad, each, carved with a figure leaning forward and bearing the roof on its up-stretched hands.] At the mouth of the passage in the east end of the hall a pillar has been added in the same style as the others, probably from some other part of the building, to support the lintel of the passage dome. The passage which is six feet long by 7' 1" broad is covered by a dome which is supported by four pilasters in the same style as the hall pillars. The pilasters are 7' 3 high, the height of the base of the dome where the corners are cut off is 8' 9", and the centre of the hollow of the dome 12'. The inside of the dome rises in three rounded bands, like three bells one within the other, to the central stone which is carved in the hanging lotus pattern. The side walls of the passage have richly carved niches 3' broad by 6' 2" high including the ornamental finish above the niche, the right hand or south niche having a figure of Ganpati, and the north niche a figure of Devi.

In the east wall is the doorway to the shrine. It is 6' broad including the ornamental panels on each side, and 7'9" high including the overhanging eave and the carved, work above the door. Over the shrine door are three bands of carved figures, each about a foot broad, separated by narrow belts of moulding. The highest band of figures is carved in the eightsided belt of stone which supports the dome. They are standing Yoginis forty in all and five in each of the eight faces. Below, over the door, are nine seated figures representing the *navagrahas* or nine planets [The nine planets are Mercury, Venus, Mars, Jupiter, Saturn, the Sun, the Moon, Rahu, and Ketul the rest of the figures in this row are four angels, two on either end, bearing garlands. The third belt has figures of the five Devis. [The other rows have angels bearing garlands.] The door into the shrine is 5' 2" high 2' 8" broad and 2' deep. Two steps lead down into the shrine which is 6' 9" square. The floor is paved with dressed stones. In the centre is a ling in a ling-came, and leaning against the back wall is a rude copper mask of a man's face with staring eyes and curled moustache, which is put over the *ling*. The temple ministrant is a Koli and the offerings are flowers. A fair is held at the temple on Mahashivratra in February-March. In the south-east corner is an opening some feet from the floor through which water can be poured till the god is flooded. In the north wall is a channel to carry off the water. There is a shelf in the north wall about five feet from the ground and a small niche in the south wall. The rest of the walls are of dressed stone, plain except corner pilasters, a carved outstanding block in the middle of each face about ten feet from the ground, and five bands of shallow carving under the beginning of the dome. The dome which is plain, except a slight ornament in the centre stone, begins ten feet from the ground and is four feet deep.

From the temple the path to Ghatghar leads across some rice fields to the right of the village of Pur, up a steep wooded pass, over the west shoulder of Shambhu with fine views of its great beetling crags and of the huge scarp of Chavand to the east. From the crest of the shoulder the path leads through pleasant woods with fine views across the valley of the north Kukdi to the wild row of peaks which forms the western face of the

Anjavla hills. In front the bare scarp of a hill, apparently with no more marked name than Pahad, runs into the valley, and beyond, to the west, are the great rocky sides and pointed top of Jivdhan. About a mile and a half from Ghatghar on the left, close to the path, in a square masonry enclosure of low roofless walls of earth and stone, are two *ling*-like stones known as Kalamja. Outside of the square walls is a circle of rough stones, about seventy-five paces round, marked with redlead. Some of the stones on the north face of the circle are larger and apparently older than the rest. The circle is interesting from its resemblance to Vetal's guardian and other rude stone circles. The chief worshippers are said to be Kolis of the neighbouring village of Pangli.

PURANDHAR FORT.

Purandhar, 18° 17' north latitude and 74° 2' east longitude, 2566 feet above the Poona plain and 4472 feet above the sea, is a famous fortified hill which gives its name to a subdivision whose head-quarters are at Sasvad, about six miles to the north-east of the hill fort. It is the loftiest peak in a range of hills about twenty miles south-east of Poona. From the south slopes of the Sinhgad-Bhuleshwar hills near the Katraj pass, and about ten miles south of Poona, a spur strikes south-east and rises into a group of five towering peaks, Purandhar, Vajirgad, Beruka, Bondalgad, and Suryaparvat. Purandhar lies about twenty miles south-east of Poona by the Bapdev pass, and about twenty-five miles by the Deva pass and Sasvad. The Sasvad route is alone fit for carriages. From the travellers' bungalow at Sasvad a very fair road broken in places by stream beds leads about six miles south-west to the foot of Purandhar hill. From the Peshwa's mansion at Sasvad Purandhar appears less lofty than Vajirgad which stands slightly in advance and partly hides the loftier hill. From the Bapdev approach, which alone shows their true features, the hogbacked Vajirgad and the saddlebacked Purandhar are separate, except for one narrow ridge.

Dacription

Purandhar is the larger, higher, and more important of the two hills. From the top of the Bapdev pass a twelve-mile long road leads by the village of Chambli to Purandhar. As they are neared, the basalt summit wall of both hills is seen to be crowned with a masonry ruin studded here and there with bastions. Purandhar, the larger and higher, is varied by two risings, on the higher of which, the loftiest point in the range, is a Mahadev temple. The hill on which this temple stands is part of the upper fort of Purandhar, while on its northern face, 300 feet below the temple and upwards of 1000 feet above the plain, runs a level terrace on which stands the military cantonment, flanked on the east by the barracks and on the west by the hospital. The northern edge of the terrace is defended by a low wall with several semicircular bastions and a gate flanked by two towers. This is called the Machi or terrace fort. At the foot of the hill is a well built rest-house, from which the ascent leads by an easy wide road with a gradient of one in eight-- Halfway up the road branches to the right and left, the right branch leading to the hospital and the left to the store gate in the centre of the cantonment and to the barracks. From the middle of the cantonment a winding road 830 yards long runs towards the upper fort and ends in a flight of rude stone step which wind between a loopholed wall of masonry and the basalt

cliff on which the fort stands. A sharp turn leads suddenly to the Delhi Gate flanked by solid bastion towers.

Passing left from the Delhi Gate the path goes along a narrow ridge flanked on each side by loopholed walls. It is in some places only eight feet wide, and, with a sheer fall on either side of over 300 feet, leads to the Kand Kada or Sky Scraper bastion, the most eastern point of Purandhar, commanding a view of Vajirgad and the Bottle Hill, and across the rich Bhima valley to the distant Mahadev range. Here is a bungalow, the oldest on the fort built by Colonel Leeson. Near the bungalow is a small reservoir and postern gate called Chor Dindi Darvaj'a or the Secret Gate. Going back to the Delhi Gate the path leads up to the Ganesh Darvaja passing by a small chamber in the thickest part of the right hand flanking, where Shahaji the father of Shivaji was confined in 1649 by Mahmud (1626 -1656) the seventh Adil Shahi king. On the left is a ruinous figure of Ganesh which gives its name to the gate. Through a third plain gate with a bastion on the right called the Bayta Buruj or Banner Bastion, the way leads to a bombproof building, once a granary and now a summer residence for the chaplain. Near the granary rises a solid mass of masonry the site of a palace said to have been built by Abaji Purandhare, the founder of the great Purandhare family of Deshasth Brahmans who were closely allied with the Peshwa's family. A little further on is a bungalow called the Eagle's Nest and slightly behind it is a mosque; the path continues towards the west with, on the left, two.small covered cisterns looking like tombs and used during sieges to hold oil and clarified butter for the garrison, while on the right is a building used as a bombproof magazine under the shelter of one of the two great risings which mark Purandhar. This rising is called either Love's Seat or the Rasa's Vada that is king's palace as Shahu (1708 -1749) the grandson of Shivaji began to build a palace here. A little further on the left is a beautiful reservoir called the Mhasoba' Taki. It runs a little under the rock and is fed with springs which furnish drinking water for the bulk of the people throughout the hot season. A little beyond the cistern are two rock-cut chambers used as dungeons. Above runs a rough path to the spur that joins the Raja's Vada eminence with its temple-crowned peak. This spur ends at the foot of a flight of fine masonry steps arranged in sets of five with a fine stone wall on either side of them. The steps lead to a equally beautifully built platform which covers the eminence and from which rises a temple of Mahadev built by the first Purandhare. Going back to the beginning of the ascent the way leads past ruins of Mhars' houses to the Khadda Darvaj'a built by one of the Peshwas for the temple priest. Slightly in advance and ending a spur is a ruinous bastion called Fatten Buruj or Victory Bastion. From this bastion the garrison are said to have leaped about 1790 when surprised by Kolis under one Kuroji Naik. Following the narrow path that runs along the back of a spur on the extreme south-west angle of the fort, a bastion called the Konkani Bastion rises 300 feet sheer. Near this bastion is a bombproof chamber able to hold twenty men, from which criminals folded, in country blankets with their heads and feet uncovered used to be hurled in the kadelot or precipice-rolling form of death. Further to the northwest is a triple bastion rudely shaped like an elephant's head and called the Hatti Bastion. Past this bastion the way leads by two deep rock-cut cisterns to the Shendi Buruj under which when it was built a married pair were buried alive. According to two copper plates found in the Inam Commission office the foundations of the Shendi Buruj several times gave way and the king of Bedar dreamt that unless a firstborn son and his wife were

sacrificed on the spot the foundations would never be sure. On awaking the king sent for the grantee Esaji Naik Chive who brought one Nath Naik and his wife Devki and the two were buried alive on the dark eighth of *Ashvin* or September-October. At the same time fifty thousand gold bricks, each brick weighing about twenty-four rupee weights or *tolas*, were put. 25,000 each, in two holes to the right and left of the tower foundation each hole about thirty feet square and twelve feet deep. The work was then finished, the king came to see the bastion, conferred the fort on Esaji Naik and granted two villages worth about £364 (910 *huns*) to the father of the buried boy. [The two grants have been published by Captain Mackintosh in Trans. Bom. Geog. Soc. I. 191 - 258. They were found by Capt. Dods, Inam Commissioner Northern Division, in his office. One is an original plate and the other is a copy of an original plate in the Madras Museum said to belong to the Kolis of Purandhar. One of them is dated the Arab year 587 or A.D. 1191 which seems to stamp the plate as false as there were no Musalman kings at Bedar in 1191.]

From the Shendi bastion the way leads to a fine reservoir on the right called Sakhari Talav or the Sugar Reservoir. A little beyond the reservoir is a stone wall and a few yards further is a good stone house used as a granary and said to have been built by Madhavrav the fourth Peshwa (1761 -1772). A few yards further on comes the point from which the round of the fort was begun. The round extends over two miles and passes by three gateways and six chief bastions.

View.

From this point the way leads to the temple platform, the highest point on the fort, which commands a varied grand and widespread view over crests of mountains, huge blocks of barren rocks and dense forest, clothed ravines, wide-spreading plains and winding rivers. To the north the eye wanders over plains and a mountain, range till it is lost in a distant ridge of pale blue hills eighty miles off. On the first range is the road leading to the Bapdev pass and the temple hill of Narayanpur, and where the range dips to the right of this temple hill, the Deva pass emerges, with, to its right, the square dismantled fort of Malhargad Details of Malhargad are given above p. 258.] built by the Panse family the hereditary commandants of the Peshwa's artillery. Still more to the right is the Lesser Bor pass through which on the 24th of November 1817 General Smith passed to Pandharpur in pursuit of Bajirav whose immense army had been routed at Kirkee a fortnight before. Half hidden by a spur from the Deva pass, a little to the left of where it emerges, is seen the palace of the Jadhav family [This palace is clearly seen from the road from which it lies about two miles. It is a large square loopholed building with small windows and narrow doors surrounded by a semi-detached loopholed wall.] Between the Deva pass and Purandhar are seen the villages of Narayanpur Chambli and Korait, and on the banks of the Karha, where it meets a small stream, lies, embowered among the bamboo mango and palm groves, the town of Sasvad with its two temples and large square mansion of the Purandhares, all three built at an estimated cost of £60,000 (Rs. 6 lakhs). Near the mansion is Bajirav's palace where the Amirs of Sind were confined, now a travellers' bungalow. Looking nearly east, at the end of the Purandhar range show the temples of Jejuri, and not far from the temples, close to the Nira bridge, is Valhe village the traditional birthplace of Valmiki the reputed. Koli author of the Ramayan. Behind are the

Bhima and Nira valleys fringed by distant hills. Turning south in the valley almost beneath Purandhar the windings of the Nira sparkle in the sun, and looking over Shirval and beyond the Mahadev range, in the distance rise Vairatgad Pandavgad and Panchgani, and over the square hill fort of Rohira and the Bori Dara are seen Mount Malcolm and the Mahabaleshvar temple and Raireshvar. To the west, where range after range stretch as far as the eye can see, the view passes over town and village, valley hill and dale, to the peak of Geser and Puluk Khind and still further to Sinhgad standing bold against the sky. North of Sinhgad by the Donje Katraj and Bapdev passes the circle ends in the temple hill of Narayanpur.

Descending to the terrace or Machi, through the triple archway in front of the Delhi Gate, the way leads by a three-pillared rock-cut cave-chamber almost beneath the banner bastion. By the chamber a steep winding path leads down about 2500 feet to the cantonment. Following a road past the canteen over the Bhairav Khind spur, where stood a gate called the Bhairav Darvaja with the ruins of a guard room, begins a four-mile walk that encircles the fort of Purandhar. Following this path, which is a broad well metalled road made in 1856, a little on its left slope are two slaughter houses, and behind them the graveyard, well removed from the camp having the eastern end of the upper fort between it and the cantonment. Continuing this walk, and following its many windings with convenient view seats, on the right rise the steep southern slopes of the upper fort crowned with frowning walls and beetling bastions and covered during the rains with wild flowers thick brushwood and the lovely arrowroot plant.

On the left, looking down on hill and vale, on woody ravines and on the winding Nira, the path leads to a southerly spur the largest on the hill called Bonchika Met or FitzClarence Point as Lord Edward FitzClarence when commander-in-chief, always used it as a drill ground. On its broad tableland is a small unfinished reservoir built by Madhavrav the fourth Peshwa (1761 - 1772). Overhanging the scarp is the Fatteh or Victory Bastion. Beyond, the road passes more to the north and leads to a second plateau with three small springs almost under the abrupt scarp which is crowned by the most westerly or Konkani bastion from which prisoners were hurled. Here lie huge strangely balanced masses of basalt fallen from the fort sides. From this tableland runs a wide south-westerly spur or point called Mesel Met or Kerr's Point. The point is sheltered from the east and is open to the west and commands rich and distant views as far as the Mahabaleshvar range. The road now turns to the east and follows the windings of the hill passing two westerly spurs. A ruined gate called the Konkani Darvaja leads to the hospital spur. From this spur a wall rises till it meets the rock on which the upper fort is built and forms, the western boundary of the lower fort. Above the wall frowns the Shendi Bastion and beneath it are three caves, two of them large, one fifty and the other 160 feet deep. The deeper cave has three chambers. The hospital spur is locally known as Lagan Mukh or Wedding Face and the hospital on it stands about a mile and a quarter from the rest-house at the foot of the hill. From the hospital the road passes through the cantonment which stands on a narrow terrace on the north face 300 feet below the upper fort flanked on the east by the barracks and on the west by the hospital. From the hospital the path proceeds, with, on its right, a fine masonry reservoir called the Mukarase Talav said to have been built by Madhavrav the fourth Peshwa (1761 - 1772), and above it a

large roomy bungalow. From the reservoir the road passes by one or two bastions on the left with several guns, said to have been taken by Shivaji from the Portuguese and continues past a large quarry, to a point where the road divides marked by a small stone temple built by a blacksmith about 1795. Taking the upper road, on the right are ten large patcherries, and on the left four sets of bachelors' quarters.

Below these buildings is the Bini Gate, the only gate remaining of the lower fort and called Bini as the Binivala's or Quartermaster General's house formerly stood close by it, where now stands a large modern bungalow. Taking the upper path from the patcherries a small stone temple and well are found, the temple built by Nana Fadnavis over the spot where the people from the neighbouring villages brought their offerings to celebrate the birthday of Madhavrav Peshwa. The bungalow close in front of the temple is built on the site of, and with much of the materials of, Nana Fadnavis' palace. Next comes a fair sized bungalow enclosed with a stone wall and facing west. This bungalow stands on the site of Madhavrav Peshwa's palace, and below it are two temples built by Abaji Purandhare. The road then passes through the market and; leads up to the east end of the terrace on which stands the cantonment Close below is a fine reservoir called Padmavati or Ruzval Talav the masonry of which is said to have been built by Shivaji. On its north bank an open space covered with mango trees is the site of a small house where died Lord FitzClarence, commander-in-chief of Bombay. The site was bought by his widow for a memorial church. This the Bhairav Khind spur, seems to spring from beneath the scarped bastion of the upper fort and running north-east to end its sweep in the rock on which Vajirgad is built. On this the highest and driest spur are the barracks, and at the extreme west on the Wedding Face spur, facing west and overlooking a broad and rich valley, is the hospital.

The earliest known mention of Purandhar is in the reign of their first Bahmani king Alaud-din Hasan Gangu (1347-1358) who obtained possession of almost the whole of Maharashtra from the Purandhar range to the kaveri and fortified Purandhar fort in 1350. About 1384 the fortifications were repaired and semicircular bastions were added by the fifth Bahmani king Mahmud I. (1378-1397). Purandhar was among the Poona forts which fell to Ahmad, the founder of the Nizam Shahi dynasty after his success at Junnar in 1486 and continued in the hands of the Nizam Shahis for more than a century. [Briggs' Ferishta, III. 120.] Under the early rule of the Bijapur and Ahmadnagar kings Purandhar was among the forts which were reserved by the Government and never entrusted to *jagirdars* or estate holders. [Grant Duffs Marathas, 53 note I.]

The fort of Purandhar seems to have passed to Maloji the grand father of Shivaji when Bahadur Nizam Shah of Ahmadnagar (1596-1599) granted him Poona and Supa. [Grant Duffs Marathas, 41.] It remained with Maloji's son Shahaji till in 1627 it was taken by the Moghals. In 1637, when Shahaji joined the service of the Bijapur kings, chiefly through his help Purandhar was won from the Moghals. Soon after, the transfer of Purandhar to Bijapur was confirmed in a treaty between Bijapur and the Moghals. Though it passed under Bijapur the fort continued to be commanded by a Hindu. [Compare Grant Duffs Marathas, 52, 54, 59.] In 1647, about the time of Dadaji Kondadev's death, the commandant of Purandhar died. As the families were friendly, Shivaji was asked to settle

some points in dispute among the commandant's three sons. He went to the fort, persuaded the younger brothers at night to make their elder brother prisoner, and during the disturbance, secretly filled the fort with his Mavlis and took it without bloodshed, keeping the brothers well disposed to him by the grant of lands and villages. [Grant Duff's Marathas, 61.] In 1665 Raja Jaysing, who was sent by Aurangzeb to the south to conduct the war against Shivaji, promptly despatched a force under Dilawar Khan to attack Purandhar. The fort was resolutely defended by Mavlis and Hetkaris, but, after a long siege, they lost heart and sent word to Shivaji that they could hold out no longer. They would have left the fort but Shivaji asked them to hold it until he should send them word to retire. Shivaji, who was unable to make head against the Moghals, came as a suppliant to Jaysing and Dilavar Khan and handed to them the keys both of Purandhar and of Sinhgad. [Details of the siege and of Shivaji's visit to Purandhar are given under History, Part II. 231 - 234.] After its capture Purandhar remained in the possession of the Moghals, till in 1670, soon after his capture of Sinhgad, it was scaled and taken for Shivaji by Suryaji the brother of Tanaji Malusre. [Grant Duffs Marathas, 109.] In 1705 Purandhar fell to the Emperor Aurangzeb (1658-1707). [Khafi Khan, Munta Khabu-1 Lubab in Elliot and Dowson, VII. 373; Grant Duffs Marathas, 177.] In 1707, after the death of Aurangzeb, Purandhar was re-taken by Shankraji Narayan Sachiv an adherent of Tarabai the widow of Rajaram (1689-1700).[Grant Duffs Marathas, 180.] In the same year, on being restored to liberty by the Emperor Bahadur Shah (1707-1712), Shabu of Satara (1708-1749) Shivaji's grandson, came to Poona and summoned Shankraji Narayan the Pant Sachiv to deliver the fort, but Shankraji did not obey. About 1710 Chandrasen Jadhay, who had taken service with the Nizam, drove back the Marathas from the Godavari to the Bhima. To support the local troops Shahu sent Balaji Vishvanath the founder of the family of the Poona Peshwas. Balaji joined Haibatrav and they two fell back on Purandhar. A battle was fought which the Marathas claim as a victory but which seems to have been a defeat as they afterwards retreated to the Salpa pass. In 1714 the first Peshwa Balaji Vishvanath (1714-1720) succeeded in procuring the release of the Pant Sachiv, who was confined at Hingangaon about forty miles east of Poona by Damaji Thorat a partisan of Kolhapur. In return for this service the Pant Sachiv's mother presented Balaji with all the Pant Sachiv's rights in Purandhar and gave him the fort as a place of safety for his family whose head-quarters had been at Sasvad. This transfer was confirmed by Shahu. In 1750 Tieffenthaler notices the hill forts of Lohogad and Purandhar. [Description Historique et Geographique de 1' Inde, I. 484.] The fort continued in the possession of the Peshwa till, in 1762, Raghunathray, the uncle of the fourth Peshwa Madhavrav (1761 - 1772), bestowed it on the Purandhare family. [Grant Duff's Marathas, 368.] After the murder of the fifth Peshwa Narayanrav (1772-73), on the 30th of January 1774, his pregnant widow Gangabai was carried for safety to Purandhar by Nana Fadnavisand Haripant Phadke. On the 18th of April the birth of a son to Gangabai at Purandhar was a deathblow to Raghunathrav's hopes of becoming Peshwa. [Grant Duff's Marathas, 326.] A short time, afterwards letters, intercepted by Haripant near Burhanpur, showed -that a plot was formed by Moroba, Bajaba, and Babaji Naik to seize Sakharam Bapu, Nana, Gangabai, and the infant Madhavray, all of whom, to escape the chill damps of Purandhar, had come to live in Sasvad during the rains. They heard of this conspiracy on the 30th of June, and at once fled to the fort. In 1775 Nana and Sakharam Bapu returned to Purandhar and from Purandhar managed all state affairs.

[Grant Duff's Marathas, 369.] After much discussion, [Details of the discussion are given under History, Part II. 259 - 260.] on the 1st of May 1776, the treaty of Purandhar was settled and signed by Sakharam Bapu and Nana Fadnavis on behalf of the Peshwa and by Colonel Upton on behalf of the Bengal Government. The chief provisions of the treaty were that Salsette or territory yielding £30,000 (Rs. 3 lakhs) a year, and Broach and territory worth £30,000 (Rs. 3 lakhs) more, should be left with the English and £120,000 (Rs. 12 lakhs) should be paid to them on account of war expenses that the treaty with Raghunathrav should be annulled; that the English should return to garrison and Raghunathrav's army be disbanded within a month; and that Raghunathrav should receive an establishment and live at Kopargaon on the Godavari. [Grant Duff's Marathas, 393-304.] In 1778, fearing the growing strength of his cousin Moroba, Nana Fadnavis retired to Purandhar and agreed to bring Raghunathrav to Poon provided no harm should come to him and his property. On the 8th of June Haripant Phadke and Mahadji Sindia joined Nana at Purandhar, and by a bribe of £90,000 (Us. 9 *lakhs*) gained Holkar to Nana's side. In 1796, alarmed at the threatened attack of Sindia and his minister Baloba on Poona, Nana again fled to Purandhar fort. [Grant Duff's Marathas, 523.] In 1817 Purandhar was one of the three forts which Mr. Elphinstone the English Resident at Poona summoned Bajirav to deliver as a pledge that Trimbakji Denglia would be surrendered. It was restored to Bajirav after a few months. [Grant Duff's Marathas, 634, 646.] In the last Maratha war, after the capture of Sinhgad, Major Eldridge with four companies of the Bombay European Regiment and four companies of Rifles marched through the Purandhar pass to the north of the fortress. A detachment under Major Thatcher, consisting of three companies of the Bombay European Regiment, and five companies of Madras and Bombay Native Infantry, marched on the 8th for the south end of the fort. The head-quarters and the rest of the division continued the march during the 9th, 10th, and 11th, and arrived by way of Jejuri in a position three miles north of the forts of Purandhar and Vajirgad. Within four miles of the camp at the village of Sasvad was a strong stone building the Peshwa's fortified palace, in which a party of 200 men, Arabs Sidhis and Hindustanis, had shut themselves with small guns and made a show of opposition. The walls were so substantial that six-pounders did them no harm. Eighteenpounders were then brought, but, though these also seemed to make no impression on the walls, they had sufficient effect on the mind of the garrison to induce them to surrender at discretion. The operations against the forts were short. On the 14th of March a mortar battery opened on them; and on the 15th Vajirgad admitted a British garrison. As this place commanded Purandhar the commandant had to accept the terms given to the garrison of Vajirgad; and the British colours were hoisted on the 16th.[Blaoker's Maratha War, 241-242. Pendhari and Maratha War Paper, 259.] In 1845, during Raghoji Bhangria's disturbances, troops were sent to Purandhar in case the insurgents might seize the fort. [Compare Part II. p. 308.]

RAJMACHI FORT.

Description.

Ra'jma'Chi, or the Royal Terrace, is an isolated double-peaked fortified hill on the main line of the Sahyadris, about six miles as the crow flies and ten by path north of the Bor

pass. From the Konkan, thickly wooded at the base, its sides rise about 2000 feet in steep rock slopes which, as they near the crest of the hill, grow gradually treeless and bare. Above the crest, from the flat hill top rises a rocky neck about 200 feet high, with, at either end, a short fortified tower-like head, the inner *Shrivardhan* that is Luck's Increase, high and pointed, the outer *Manranjan* that is the Heart-Gladdener, lower and flat-topped.

A tongue of land about 300 yards broad, joins the Rajmachi terrace to the rough plateau that runs along the crest of the Sahyadris north from Khandala.

Across this tongue of land, about half a mile from the foot of the central hill top, runs a strong stone wall, seventeen feet high and eight thick with a parapet loopholed for musketry and at intervals with bastions pierced for cannon. Within this line of wall a wide stretch of tilled woodland ensures for the garrison a full supply of grain, grass, and fuel. From this upland, at a safe distance from the neighbouring heights, the central hill top rises three to four hundred feet high, a sheer black overhanging cliff crowned by s battlemented peak, and towards the west strengthened by a double line of encircling walls. On the crest of the neck that joins the two peaks, fronting a small temple of Bhairav, stand three old stone lamp-pillars or *dipmals* and two small quaintly-carved stone chargers ready saddled and bridled for the god. The temple, which is little more than a hut, has three pairs of small black stone images of Bhairav and his wife Jogeshvari, presented, according to the temple servant, by Shivaji, Shahu, and Bajirav Peshwa.

From either end of the neck rise the steep fortified sides of Shrivardhan and Manranjan. Shrivardhan, the eastern and higher fort, less sheer to the south than to the north, is in places strengthened by a triple line of wall. On the south side, through the ruined gateway, is reached a chamber cut in the rock once used as a granary or storehouse, and close by a large open rock-cut reservoir. On the, north, in a narrow ledge of the steep cliff, hollowed into the hill and always sheltered from the sun, is a cistern with an unfailing supply of pure water. The inner fortification, with a few ruined dwellings, encloses the central peak, the gadhi or stronghold. [The Musalmans call it the Bala Killa or upper fort. But unlike most Deccan hill forts Rajmachi was never held by Musalmans and is throughout purely with neither a mosque nor an idgah, one or other of which is found in most Deccan forts] Manranjan the outer hill, less completely protected by nature, is very carefully fortified with two high strong lines of wall. Of these the outer line, running along the crest of the cliff, encloses some cisterns and reservoirs of cutstone; the inner, encircling the flat hill top, has within it the powder magazine, a long low tomb-like roofless building of very closely fitting cut-stone, and close to it the ruins of the captain's house and a cistern. The western wall commands the mind-pleasing or manranjan prospect that gives the fort its name. Below lies the royal terrace wooded and stream-furrowed to the north, bare and well tilled to the west, and to the south laid out in fields with a small lake and a shady hamlet, of Koli huts. North and south, beyond the plateau, stretches the main line of the Sahyadri hills, their sides rising from deep evergreen forests in bare black cliffs, to the rough thinlywooded part-tilled terrace that stretches eastwards into the Deccan plain and along the crest of the Sahyadris, which is broken by wild rocky peaks and headlands from Harishchandragad fifty miles to the north to Bhojya eighteen miles to the south. Westwards stretch outlying spurs and ranges with deep water-worn valleys and steep well-wooded sides. Far off to the right rise Mahuli, Gotaura, Tungar, and the Salsette hills; in front, beyond the long flat backs of Matheran and Prabal lie the harbour island and city of Bombay; and to the left sweep the long range of hills that by Nagothna and Sagargad passes from the Sahyadris to the extreme west of Alibag. [From Rajmachi, as the crow flies, Mahuli is about forty-six miles and Gotaura forty-seven miles; Bombay thirty-eight miles; Tungar, Kamandurg, and Sassu Navghar hills form one range extending from fortytwo to fiftytwo miles and Sagargad is thirtyfive miles.]

The first notice of Rajmachi is in 1648 when it was taken by Shivaji. [Grant Duffs Marathas, 63.] In 1713 the fort surrendered to Angria, [Grant Duffs Marathas, 193.] and was ceded by him in 1730 to the second Peshwa Bajirav (1721-1740). [Grant Duffs Marathas, 231.] In 1776 the impostor Sadoba, a Kanoja Brahman who called himself Sadashivrav Bhau, took the greater part of the Konkan and came to the Bor pass. Here he was opposed and his troops checked for a time but he headed them with spirit and carried the pass and Rajmachi sent him offers of submission. Pretended overtures of submission were made to him by the Poona ministers by which he was for a short time amused, until two of the Peshwa's officers suddenly fell on him in the neighbourhood of Rajmachi, when his whole force fled to the Konkan, and Sadoba escaped to Bombay. [Grant Duffs Marathas, 397.] In the Maratha war of 1818 the fort surrendered without resistance. [Pendhari and Maratha War Papers, 258. In these papers the fort is mentioned as Raiy Machee.]

RAJUR.

Ra'jur, ten miles west of Junnar, is a large village on the left bank of the Kukdi, with in 1881 a population of 3037. In the village, surrounded by three or four large flat stones and apparently at one end of a raised seat or pavement, about six inches from the ground, is a standing-stone or *ubhi dhond*. It is an undressed block of stone of which 5' 6" are above ground roughly square with faces varying in breadth from one foot to one foot and a quarter, the top as if half-sliced away. One of the large stones, laid on small rough stones to the left of the standing stone, measures 4' 7½" long by 1 9" broad and 9" thick. The length of the raised pavement in front of the standing stone is 7 10. and the breadth 6' 10" There are no signs of tools and no letters. The people say it has been there since the beginning of time or *mulpasun*. It is not worshipped and they do not know who set it up. It was men not the Pandavs. About thirty yards to the west is a platform with large rough stones. A little further on the right, buried all but a few inches, is a Sati stone, and about twenty yards further west a second standing stone roughly pointed with 5' 2" above ground and faces about two feet broad.

About a hundred yards to the east of the village are the remains of three Musalman buildings of dressed stone. The first on the right is a ruined tomb of which nothing but the plinth is left. The next on the left is about twenty feet square and is in fair repair except that the dome is gone. Inside are three tombs two of men and one of a woman. There is an inscription over the north door. A few paces to the north-west is a small mosque about eighteen feet by sixteen, with plain masonry walls and a brick dome. Over the prayer

niche is an inscription of two lines. There were corner minarets and a cornice but they are ruined. On the top of a mound, about a hundred paces to the north of the village, to the west is a ruined roofless temple of Mahadev with low walls. In the east face is a door with a carved threshold stone apparently belonging to a twelfth or thirteenth century temple. In front of the temple, about twenty feet to the east, is a row of old stones. On the left is a defaced stone with the remains of an open hand upheld in sign of blessing, a proof that the stone is a Sati stone. The next is a much defaced cobra stone or Nag Raj. The third is the upper part of a broken Sati stone. In the right corner, at the foot of the stone, is the figure of a dead man and a horse in the panel above. Near the top of the stone is an open right hand. The fifth and sixth stones are two battle stones too worn to be read. About two paces to the east, are two carved stones. On the stone to the right in the lowest of three panels are the Sati and her lord both lying down. In the panel above is the woman going to the place of sacrifice seated on a horse and holding something in her up stretched hands. In the top panel a man and woman worship what seems like a *ling* above and a bull below.

Approached from the east the stone buildings of the Musalman tomb and mosque are notable, and behind is a fine view of the great square shoulders of Chavand blocking the mouth of the Kukdi valley. To the left in the Kukdi valley, to the right are the castellated tops of Shambhua and behind and over-topping it the wild shoulder of Karkumba.

RANJANGAON.

Ra'njangaon, nine miles south-west of Sirur, with in 1881 population of 1392, has a famous temple of Ganpati. Ranjangaon is said to be the scene of one of the eight incarnations of Ganpati. The temple is said to occupy the site of a Hemadpanti temple of which four pillars remain, two of them at the entrance to the enclosure. The present shrine is said to have been built about 200 years ago by Chintamanrav Maharaj the second of the Chinchvad Devs. The temple consists of a hall or *mandap* with rows of wooden pillars and an outer and inner shrine. The outer shrine or antechamber is surmounted by a small spire and the inner shrine by a large spire both rough looking. The large spire rises in four their the lowest tier being the widest. Each of the three upper tiers is ornamented with a frieze. A small pot or *kalash* flanked by four minarets completes the spire. In front of the hall is a stone rat, the carrier of Ganpati. To the north of the temple is a corridor with fifteen arches in front, each arched compartment roofed by a low conical vault. The arcade is the gift of the Povar family. A flight of steps leads to the flat corridor roof which is a favourite place of resort during the large fair on Ganeshchaturthi in August-September when about 1000 people assemble. On the extreme west beyond the shrine and joined to it is a tiny shrine of Mahadev. The temple enjoys a yearly Government cash grant of about £161 (Es. 1610) and land assessed at £3 10s. 6d. (Rs. 351/4).

In 1751 Ranjangaon was plundered by the Moghals. [Grant Duff's Marathas, 276.] In 182 Captain Clunes notices Ranjangaon with 140 houses, nine shop several wells, and a resthouse. [Itinerary, 11.]

ROTI.

Roti, a small village seven miles north-east of Supe, with in 1881 a population of 229, has a temple of Tukai Devi built by the Medhe family. The temple is quadrangular and built of cut-stone. In honour of the goddess the Medhe family give a large feast to Brahmans twice a year, one on the full-moon of *Chaitra* or March-April and the other on the bright eighth of *Ashvin* or Sept.-Oct. A yearly fair is held at the temple on the bright ninth of *Magh* or Jan.-Feb.

SAKAR PATHAR.

Sa'kar Pa'tha'r, four and a half miles south of Lonavla station [Two other roads lead to Sakar Pathar both from Poona one fifty-three miles by Paud, Bhorkas, and Jambhulna, and the other about forty-five miles by the Bombay road.] is a raised plateau, 3000 feet above the sea or about 500 feet higher than Matheran (2460). The plateau is extensive [The plateau is large enough for hundreds of houses besides room for a racecourse and cricket ground. Mr. J. G. Moore, C. S.] and fairly wooded with good building sites on the west close to the edge of the Sahyadris, some of them commanding very fine views. At the back and to the east of the building sites is a nicely wooded ridge. The neighbourhood has beautiful walks and rides and the country to the south, along the edge of the Sahyadris, is mountainous and well wooded with good big game shooting. The watersupply is from a little lake on the plateau with a twenty-five feet high dam and an area of three acres. Allowing for evaporation and other losses the lake is calculated to hold about 3,000,000 gallons or 12,000 gallons a day for 250 days. In 1883, in sanctioning Sakar Pathar as a healthresort, Government observed that the creation of a new sanitarium in an accessible position like Sakar Pathar, near the line of rail and connected with it by a road passable for wheeled traffic, with a good climate, fair water-supply, and fine scenery, would be a great advantage to dwellers both in Bombay and in the Deccan. Leases were granted on the same terms as the Matheran and Mahabaleshvar leases. No applicant is to be allotted more than one site, and each is to be bound to build a house within three years or to forfeit his claim to the site. [Government Resolution, Revenue Department, 8569 of 21st November 1883.]

SASVAD.

Sa'svad, on the left bank of the Karha about sixteen miles south-east of Poona, is a municipal town, the head-quarters of the Purandhar sub-division, with in 1881 a population of 5684. Sasvad stands on the old Poona-Satara road by the Babdev and Diva passes. The 1872 census showed 6416 people of whom 6147 were Hindus and 269 Musalmans; and the 1881 census showed a decrease of 463 or 5684, of whom 5435 were Hindus and 249 Musalmans. A weekly market is held on Monday when the chief article of trade is grain from the villages round. Besides the sub-divisional revenue and police offices Sasvad has a municipality, dispensary, post-office, two old palaces, a mosque built entirely of Hemadpanti pillars and stones, and a temple. The municipality, which was established in 1879, had in 1882-83 an income of £271 (Rs.2710) and an expenditure of £253 (Rs. 2530). In 1883 the dispensary treated twenty in-patients and 5517 out-

patients at a cost of £70 12s. (Rs. 706). Sasvad was the original Deccan home of the Peshwa family. [Grant Duff's Marathas, 144. In 1713 Balaji, the first Peshwa, fled to Sasvad and here also he died in 1720. Ditto, 189, 209.] Outside of the town and across the river is the old Peshwas' palace which is now used as a Collector's bungalow and office. The palace bears marks of English shot. A large temple of Sangameshvar with steps leading to the river, stands on a small delta of land at the meeting of the Karha and one of its feeders. Round the chief temple are small shrines, tombs, and *sati* stones. Near the temple is the fortified palace of the Purandhare Brahman family, who were closely allied to the Peshwas for nearly a century. [Grant Duff's Marathas, 186.] In *a* revenue statement of about 1790 Saswer appears as the head of a subdivision in the Junnar *sarkar* with a revenue of £1765 (Rs. 17,650).[Waring's Marathas, 240.] In 1818 the palace for ten days withstood the attack of General Pritzler's division.

About 1840 the Amirs of Sind were confined in Sasvad. Though prisoners they were allowed to shoot and the neighbourhood of Sasvad was thoroughly cleared of wolves. [Murray's Bombay Handbook (New Edition), 193.] In 1837 Sasvad had a nursery garden.

SHAMBHUDEV HILL.

Shambhudev Hill is a detached height in the Bhima valley within the village limits of Bibi about twelve miles north-west of Khed. The hill is in the form of a truncated cone and is crowned by a temple of Shambhu. The holiness of the hill has left its sides a picturesque contrast to the surrounding barren heights. The temple is built within a quadrangle and has minutely carved wooden brackets over the pillars at the entrance to the hall or *mandap*. On a ledge above the *ling* are some wooden figures and the inside of the temple is painted by a Sonar with frescoes one of them a curious representation of a railway train with a Raja driver. [The origin of the Raja-driver railway train fresco may be the fact that His Highness Holkar, the former owner of the village, is fond of enginedriving. Mr. H. E. Winter, C. S.] Small fairs are held on the full-moon of *Chaitra* or March-April and on the Mondays of *Shravan* or July-August.

SHIVNE.

Shivne, a small village eight miles south of Khadkala, with in 1881 a population of 861, has a weekly market on Tuesday.

SINDE.

Sinde hamlet, close to Bhamboli in Khed, seven miles west of Chakan, has within its limits the hill of Bhamchandra with some old Buddhist caves. The hill rises steep from the plain on the south and west and has the caves in the southern scarp. A difficult cliamb leads to a cistern on the right which the villagers call Sita's Bath. A little further, after rounding a jutting neck, comes the chief cave of the group dedicated to Bhamchandra Mahadev. The cave is small and faces south-west, and has a cistern to its left. The entrance, which is eight feet high by thirteen wide with a small arched doorway in the centre, is closed. The cave is nearly square (15' x 14') and seven feet high with a flat roof.

Four pillars, two on either side, divide the cave into three parts. Each of the two compartments is adorned with a pilaster much like the pillars, and each has a niche with pillared jambs and canopy. In the middle are traces of a daghoba or a round base five feet in diameter within a square mark where it once stood. The umbrella is cut out of the roof. The pillars are massive and square but twice chamfered of halfway up so as to be octagonal. The capitals have massive projection on all four sides. In an inner shrine of the temple are a ling and a figure of Buddha or a Tirthankar. The figure is carved on a detached stone and may once have ornamented the daghoba. An elaborately sculptured doorway separates the inner from the outer cave. The doorway is two feet wide by four feet high with carvings chiefly of human figures. The cave has no horse-shoe arch or Buddhist rail ornaments. The soft rock of the hill has weathered away in places, and the screen or doorway dividing the two shrines has been cemented by the villagers to keep it in its place. Further on is a cell or cavern, and at some little distance in the middle of a difficult escarpment is a cave, at the end of which is a winding cavernous road, low and narrow, said to pass several miles into the hill. Higher up are one or two inaccessible caves, and beyond on the west is another small cave. The ministrant of Bhamchandra Mahadev enjoys land in Bhamboli village. [The late Mr. G. H. Johns, C. S.]

SINHGAD FORT.

Description.

Sinhgad or Kondhana fort, about twelve miles south-west of Poona, stands on one of the highest points of the Sinhgad-Bhuleshvar range 4322 feet above sea level and about 2300 feet above the Poona plain. Not far to the east of Sinhgad the range divides the main range running east to Bhuleshvar and a branch joined to Sinhgad by a high narrow ridge running south-east to Purandhar. On the north and south Sinhgad is a huge rugged mountain with a very steep ascent of nearly half a mile. From the slopes rises a great wall of black rock more than forty feet high, crowned by the nearly ruined fortifications of Sinhgad.

The fort is approached irregularly by pathways and regularly by two gates. The pathways, which are almost impassable except to the hillmen or Mavlis, are bounded by high and steep ridges on the east and south. The gates are on the north-east and south-east; the north-east or Poona gate is at the end of a winding ascent up the profile of a steep rocky spur; the easier Kalyan or Konkan gate stands at the end of a less difficult ascent guarded by three gateways all strongly fortified and each commanding the other. The ordinary mode of ascent to the fort is by sitting on a board hung by ropes to two bamboo poles and with a smaller board for a foot rest.

The fortifications, which consist of a strong stone wall flanked with towers, enclose a nearly triangular space about two miles round. Though generally triangular the summit is very irregular rising in many places within the walls into low rugged eminences.' [The greatest extent of the summit from east to west is about 3000 feet and about 2500 feet from north to south. Its irregular shape, which conforms to the direction of the scarped sides of the rock on which the walls stand, deprives it of a diagonal proportional to these

dimensions. Blacker's Maratha War, 240.] The north face of the fort is naturally very strong; the south face, which was easily taken by the English in 1818, is the weakest. The triangular plateau within the walls is used as a health-resort by the European residents of Poona in April and May, and has several bungalows. The plateau commands a splendid view on all sides.

History.

The earliest mention of the fort, which was known as Kondhana until in 1647 Shivaji changed its name to Sinhgad or the Lion's Fort, is in 1340 when the Delhi emperor Muhammad Tughlik (1325-1351) marched against it. Nag Naik, its Koli chieftain, opposed Muhammad with great bravery, but was forced to take refuge within the walls of the fort. As the only way to the hill top was by a narrow rock-cut passage, Muhammad, after fruitless attempts on the works, blockaded the fort. At the end of eight months, as their stores failed them, the garrison left the fort and Muhammad returned to Daulatabad. [Mackintosh in Transactions Bombay Geographical Society, 1.192 Briggs' Ferishta, 1.420.] In 1486 Kondhana appears among the Poona forts which fell to Malik Ahmad, the founder of the Ahmadnagar dynasty (1490-1608), on his capture of Shivner. [Briggs' Ferishta, III. 191.] In 1633 Jijibai the mother of Shivaji was taken prisoner by the Musalman governor of Trimbak, but released and conveyed to Kondhana. [Grant Duff's Marathas, 49.] As regent for the Ahmadnagar king Shahaji held Kondhana among other Poona forts. [Shahaji held Kondhana and Purandhar, being at the head of the government, as under the Muhammadan governments, these two forts were reserved by the king and never entrusted to *jagirdars*. Grant Duff's Marathas, 53 note 1.] When, in 1637, Shahaji, pursued by the Bijapur forces from Lohogad to Kondhana and from Kondhana to the Konkan, agreed to enter Bijapur service, he gave up five Poona forts of which Kondhana seems to have passed to Bijapur and the other four to the Moghals. [Elliot and Dowson, VII. 59 - 60; Grant Duff's Marathas, 53.] In 1647 Shivaji gained Kondhana by a large bribe to its Musalman commandant and changed its name to Sinhgad or the Lion's Den. [Grant Duff's Marathas, 60. Elliot and Dowson, VII. 270 - 271; Grant Duff's Marathas, 88,] In 1662 on the approach of a Moghal army under Shaiste Khan, Shivaji fled from Supa to Sinhgad, and from Sinhgad he made his celebrated surprise on Shaiste Khan's residence in Poona. He sent two Brahmans in advance to make preparations. One evening in April a little before sunset Shivaji set out from Sinhgad with a considerable body of foot soldiers. These he posted in small parties along the road, and took with him to Poona only Yesaji Khan, Tanaji Malusre, and twenty-five Mavlis. The Brahmans had won over some of the Marathas in Shaiste Khan' employ. They arranged that two parties of Marathas should enter the town, one as if a wedding party, the other as if bringing prisoners, and that Shivaji and his twenty-five Mavlis should pass in with them. Shivaji's party passed in safety, put on their armour, and at the dead of night, by secret ways, reached the Khan's house. The house was well known to Shivaji as it was the residence of his father's manager Dadaji Kondadev. They entered through the cook-house, killed the cooks, and as they were cutting through a built-up window the alarm was raised. Three of the Mavlis entered Shaiste Khan's room, but two fell into a cistern of water, and the third, though he cut off Shaiste Khan's thumb, was killed by his spear. Two slave girls dragged Shaiste Khan to a place of safety. The Maratha's killed many of his followers, cut to

pieces some of the women, and chopped off the head of an old man whom they took for Shaiste Khan. The kettledrums beat an alarm, and the Marathas retired, lighting torches and burning bonfires as they went up Singhad hill in derision of the Moghals. Next morning a body of Moghal horse gallopped towards the fort. An unexpected fire of musketry threw them into confusion and they retired in disorder. A party of Shivaji's horse fell on them and they took to flight, the first time that Moghal cavalry were chased, by Marathas. A second attempt was made to invest Sinhgad, but the siege was not pressed. For some time after this Sinhgad continued to be Shivaji's head-quarters. In 1664, hearing of his father's death, Shivaji came to Sinhgad after the sack of Surat, and spent some days in performing his father's funeral rites. To Sinhgad he returned in November 1664, after plundering the town of Ahmadnagar, defeating the Bijapur troops with great slaughter, and sacking and burning Vengurla. [Grant Duff's Marathas, 88,89 -90.] In April 1665 a fresh Moghal force invested Purandhar and blockaded Sinhgad, [Grant Duff's Marathas, 92: Elliot and Dowson, VII. 272-273.] where were Shivaji's wife and his mother's relations. Finding their rescue impossible, as all the roads were blockaded, Shivaji sued for forgiveness from the Moghal general Raja Jaysing. Raja Jaysing accepted his offer of submission, the siege was stopped, 7000 persons men women and children came out of Sinhgad fort, and the Moghals took possession. [Elliot and Dowson, VII, 273.] In the treaty which followed Shivaji gave to Jaysing twenty of his thirty-two forts, among them Purandhar and Sinhgad with all their dependent districts. In 1666 Jaysing placed strong garrisons in Sinhgad, Lohogad, and Purandhar, but in December of the same year, after his escape from Delhi, Shivaji regained all these forts. In 1667 Shivaji obtained from Aurangzeb the title of Raja and his father's districts of Poona, Chakan, and Supa, but Sinhgad and Purandhar were kept by the Moghals. Shivaji resolved to take them, and his capture of Sinhgad in 1670 forms one of the most daring exploits in Maratha history.

As Sinhgad was commanded by a celebrated soldier Ude Ban with a choice Rajput garrison, it was deemed impregnable. Security had made the garrison somewhat negligent, and Shivaji formed a plan for surprising the fort. The enterprise was entrusted to Tanaji Malusre who offered to surprise Sinhgad if he was allowed to take his younger brother Suryaji and 1000 picked Mavlis. Accordingly, in February 1670, a thousand Mavlis under Tanaji and Suryaji set out from Raygad in Kolaba, and, taking different paths, met near Sinhgad on the night of the dark ninth of *Magh*. Tanaji divided his men into two parties. One party under his brother Suryaji he left at a little distance with orders to advance if necessary; the other party under-his own command lodged themselves undiscovered at the foot of Sinhgad rock. When it grew dark, choosing the sheer southwest gorge as the part least likely to be guarded, one of the Mavlis climbed the rock and made fast a rope ladder up which the rest crept one by one. Each, as he gained the top, lay down. [The old people of Sinhgad fort say that the rope was taken by a large lizard or ghorpad, who also dragged up tanaji who made fast the rope and enabled the Mavlis to climb up. Mr. J. McL. Campbell, C. S.] In spite of their care, before 300 of them had reached the top, some movement alarmed the garrison. One of them drew near, but was silently slain by an arrow. Still the alarm spread, and the noise of voices and of a running to arms showed Tanaji that a rush forward was his only chance of surprise. The Maylis plied their arrows in the direction of the voices, till a blaze of blue lights and

torches showed the Rajputs armed or arming and discovered their assailants. In the desperate fight that followed Tanaji fell. The Mavlis lost heart and were beating a retreat to the ladder when Suryaji, Tanaji's brother, met them with the reserve. He rallied them, asked them if they would leave their leader's body to be tossed into a pit by Mhars, told them the ropes were broken, and there was no retreat; now was the time to prove themselves Shivaji's Mavlis. They turned with spirit and, shouting their war-cry, 'Har Har, Mahadev, dashed on the garrison, and, after a desperate fight in which 300 Maylis and 500 Rajputs were slain or disabled, gained the fort. Besides those who were slain or wounded in the fort, many Rajputs who ventured over the crest of the rock were dashed to pieces. [The tombs of Tanaji and Ude Ban the Rajput commandant lie 150 yards apart near the north-west corner of the fort. Ude Ban is revered as a saint or pir.] A thatched house turned into a bonfire flashed the news to Shivaji in Raygad fort in Kolaba about thirty miles west of Singhad. Contrary to his custom, Shivaji gave each of the assailants a silver bracelet and honoured their leaders with rich rewards. He grieved over Tanaji and said, playing on the name of the fort, Singhad, the lion's fort, is taken but the lion is slain; I have gained a fort and lost Tanaji. Survaji was made commandant of Sinhgad, [Grant Duffs Marathas, 108-109.] and a high masonry wall was built across the top of the gorge which the Mavlis had scaled. In 1685 Aurangzeb ordered posts or thanas to be placed in the country between Junnar and Sinhgad. In February 1700 Rajarani, the second son of Shivaji, took shelter in Sinhgad and died a month later. Between 1701 and 1703 Aurangzeb besieged Sinhgad. After a three and a half months' siege the fort was bought from the commandant and its name changed to Bakshindabaksh or God's Gift. In 1706, as soon as the Moghal troops marched from Poona to Bijapur, Shankraji Narayan Sachiv chief manager of the country round, retook Sinhgad and other places. The loss of Sinhgad was a great grief to Aurangzeb and aggravated the illness of which in the next year he died. He sent Zulfikar Khan to take Sinhgad. The garrison yielded from want of supplies but as soon as Zulfikar retired, from the same cause the hill was speedily retaken by Shankraji Narayan. [Grant Duffs Marathas, 180-181.] In 1750 Tarabai, the grand mother and keeper of the prisoner chief of Satara, on pretence of paying her devotions at her husband Rajaram's tomb in Sinhgad, endeavoured to persuade the Pant Sachiv to declare for her as head of the Maratha empire. [Grant Duff's Marthas, 270.] In 1750 Balaji Peshwa arranged that the Pant Sachiv should give him Sinhgad in exchange for the forts of Tung and Tikona in the Bhor state. [Grant Duff's Marthas, 272.] On his defeat by Yashvantrav Holkar at the battle of Poona on the 25th of October 1802, Bajirav Peshwa fled to Sinhgad. From Sinhgad, where he remained three days, Bajirav sent an engagement to Colonel, afterwards Sir Barry, Close the British Resident, binding himself to subsidise six battalions 0f sepoys and to cede £250,000 (Rs. 25 lakhs) of yearly revenue for their support. In May 1817 when Mr. Elphinstone found Bajirav levying troops he warned him of his danger and told him that unless Trimbakji Denglia, the murderer of Gangadhar Shastri, was given up or driven out of the Peshwa's territory, war with the English must follow. Some days passed without any answer from Bajirav and then Mr. Elphinstone formally demanded the surrender of Trimbakji within a month and the immediate delivery of Sinhgad, Purandhar, and Raygad as a pledge that Trimbakji would be surrendered. On the 7th of May Mr. Elphinstone threatened to surround Poona if Sinhgad and the other two forts were not given up in pledge of Trimbakji's surrender, and, at the last moment, at daybreak on the 9th of May, when troops were already moving

round the city, Bajirav issued an order for the surrender of the forts. The forts remained in British charge till August, when, as the Peshwa agreed to the treaty of Poona (13th June 1817), they were restored to him. [Grant Duff's Marathas, 558, 634, 646.] After the battle of Kirkee (5th November), the Marathas placed some guns under the protection of Sinhgad, but, on the 18th of November, a detachment sent by General Smith brought away fifteen of them without loss. [Pendhari and Maratha War Papers, 129.] Singhad remained with the Marathas till the 2nd of March 1818 when it surrendered to General Pritzler. On the 14th of February General Pritzler marched from Satara and came by the Nira bridge to Sinhgad. The march was accomplished without any molestation though the line of march with the train stores and provisions stretched four miles and the latter part of the road lay among hills with numerous ravines. The siege of Sinhgad was begun on the 24th of February. The head-quarters of the force were established near a stream about two and a half miles south-east of the fort, probably near the village of Kalyan. As one of the avenues from the Poona gate on the east communicated with the northern valley, six companies of the second battalion of the 7th Bombay Native Infantry and a body of auxiliary horse, invested it on that side near Donje village. On the crest of the ridge, opposite that extremity, at the distance of 800 yards, a post and battery of one eight-inch mortar, one five and a half inch howitzer, and two six-pounders were established. The battery opened on the 21st. On the 22nd four companies of the 2nd battalion of the 15th Madras Native Infantry marched for Poona and were replaced by the remaining four companies of the 2nd battalion of the 7th Bombay Native Infantry. The mortar battery, which opened on the evening of the 22nd and consisted of one ten and three eight-inch mortars and three five and a half inch howitzers, was placed under cover of a hill southeast of the fort. On the 24th, Captain Davies with 1800 Nizam's reformed horse joined Major Shouldham's post in the northern valley from which two six-pounders were ordered to Poona. Opposite the south-west angle, about 1000 yards off a battery of two twelve-pounders and two six-pounders was established and opened on the 25th of February. To the right of this battery, 700 and 1000 yards from the gate, two breaching batteries, each of two eighteen-pounders, opened on the 28th against that point. By the 1st of March, after 1417 shells and 2281 eight-pounder shots had been fired, the garrison of 1200 men, 700 of them Gosavis and 400 Arabs, hung out a white flag. The garrison were allowed to march out on the 2nd of March with their personal arms and private property. The garrison engaged to proceed to Elichpur in Berar accompanied by a guard from the British Government, and to bind themselves by giving hostages not to enter into the service of any native state Blacker's Maratha War, 239-241; Pendhari and Maratha War Papers, 240,] Forty-two guns twenty-five wall pieces, and a quantity of powder and shot, were found in the fort. Prize property to a vast amount, consisting of pearls and diamonds said to have been removed there for safety by Poona merchants, was found in Sinhgad. Many of the soldiers carried about for several days hats full of pearls jewels and gold ornaments for sale without knowing their value being anxious to exchange them for money or exchange bills on Bombay ere the prize agents should discuss the plunder. [Fifteen Years in India, 490.] Along with other treasure a golden image of Ganesh was found hidden in a masonry pillar in Sinhgag fort. It was said to be worth £50,000 (Rs. 5 lakhs) and a ransom of £15,000 (Rs. 1,50,000) was offered for it. [Bombay Courier, 21st March 1818. This image is probably referred to in Pandurang Hari (p. 45 note) where it is said to have had diamonds for eyes and been studded with jewels and valued at £5000

(Rs. 50,000). So in July 1818, with jevels and other property of Bajirav Peshwa, a gold image of Vishnu was found at Nasik. It was made in 1707 and weighed 370 rupees weight. It was taken by Bajira with him in all his wanderings in a state palanquin. It came to Nasik in the Maratha war here it was discovered by the British and sent to Poona. Higginbotham's Asiatic Journal Selections, 364-365.] In 1818 Babaji Pant Gokhle, one of the murderers of the brothers Vaughan at Talegaon; was confined by Mr. Elphinstone in Sinhgad where he died in 1835[Grant Duff's Marathas, 654 note 2; Deccan Scenes, 46.] In 1862 the fort was described as ruinous with crumbling walls and gates in disrepair. The fort was able to hold about 1000 men and had ample water with supplies from the neighbouring villages of Donje and Peth Shivapur. [Government Lists of Civil Forts (1862),]

SIRUR.

Sirur or **Ghodnadi**, [Ghodnadi is the local name. It is called Sirur as it lies within the limits of Sirur village two miles, to the north-west.] on the right bank of the Ghod about forty miles north-east of Poona, is a municipal town, the head-quarters of the Sirur subdivision, with in 1881 a population of 6325. Sirur is in the extreme west of the subdivision and displaced Pabal in 1867 on its transfer from the Ahmadnagar district. Sirur has about 285 money lenders traders and shopkeepers, some of whom are rich. They trade in cloth and grain. At the weekly market on Saturday large numbers of cattle and horses are sold. Besides the revenue and police offices of the Sirur sub-division the town has a municipality, a travellers' bungalow, and a post-office. The municipality was established in 1868 and in 1882-83 had an income of £678 (Rs. 6780) and an expenditure of £512 (Rs. 5120). As early as the beginning of the present century its healthy situation on the Ghod, midway on the main road between Poona and Ahmadnagar, marked out Sirur as a suitable site for a cantonment. The station is about 1750 feet above the sea, and the country round is hilly and uncultivated. Hills rise in a succession of ranges one above the other, stretching for a long distance along the north bank of the Ghod. Along the south bank, where the station stands, the country is more regular with occasional hills and little forest land. Sirur was occupied in 1803. The station has a good supply of forage and is barely more than one march (thirty-nine miles) from Poona. The garrison of Sirur consists of the Poona Auxiliary Horse The Poona Horse was raised in 1817, The article of the Bassein treaty of 1802 which obliged the Peshwa to maintain a cavalry force was annulled and this corps was substituted. Grant Duffs Marathas, 566, 645.] living in neat regimental lines.

Colonel Wallace's Tomb, (1809).

About a third of a mile from the town, a mile from the cantonment, and a little to the north-west of the parade ground, is the graveyard with several obelisks and monuments. The most notable monument is Colonel Wallace's tomb, a fluted column about fifteen feet high on a three-stepped masonry base. [The details are: A masonry base 14' 2" by 12' 1½" with three steps, the first 11' 6" by 9'6", the second 10' by 8", and the third 6' by 6i" square. The column is 15' 4" high, 9' 6" round the middle, and 14' round the base. The American Mission Catechist, Sirur.] On the pedestal is a marble tablet with these words:

Sacred to the memory of Col. William Wallace of His Majesty's 74th Regiment of Foot and Commander of the Force subsidised by His Highness the Peshwa. A man respected and beloved for his Gallantry, Devoted Public Zeal, Ardent Honourable Rectitude, and Noble Candour. He died at Sirur on the 11th of May 1809 aged 47 years.

This seems to be the Colonel Wallace of whom, as Brigadier of the trenches at the siege of Gavilgad (7th-15th December 1803) in the Second Maratha War, the following story is told. Some guns had to be taken by night to a high and difficult position on the hill. The officer in charge came to Colonel Wallace and reported that it was impossible to take the guns. Colonel Wallace called for a light and drawing his papers out of his pocket said: ' Impossible, it can't be impossible, here it is in the orders.' [Welsh's Military Reminiscences, 1.196; Colebrooke's Elphinstone, I. 86 -109.] It is interesting that a man of so admirable a spirit, and, as his epitaph seems to show, of so noble a life should still be remembered by the aged at Sirur as Sat Purush the Holy Man, and that his tomb, which he wisely endowed, should still be worshipped. Colonel Wallace is the guardian of Sirur. Thursday is his great day and Sunday also is lucky. Vows offered to get rid of barrenness and other spirit-sent ailments never fail and newly married pairs are brought to Colonel Wallace, as they are brought to Maruti, that his guardian power may drive evil, that is evil spirits, from them. Except Brahmans and Marwaris all Hindus of Sirur and the neighbouring villages, chiefly Kamathis, Kunbis, Malis, Mhars, and Mangs, worship at Wallace's tomb. People, whose wishes have been fulfilled or who have been freed from diseases, offer incense, lay flowers before the tomb, and distribute cocoanuts, sweetmeats, or coarse sugar. Sometimes Kamathis and other flesh-eaters perform a ceremony called *kanduri*, when a goat is killed outside of the graveyard and the body brought in, offered at the tomb, and eaten by the ministrant. The ministrant, Dulaba, who is the son of the original pensioner, Colonel Wallace's groom, gets the offerings. At harvest time the villagers bring him first fruits of grain as *naivedya* or food for the saintly spirit. The Colonel's ghost still sometimes walks on no-moon and on full-moon nights. [It is said that the ease with which he reduced some of the strongest forts in the Deccan caused Colonel Wallace to be regarded with great awe by the peopls as one. with supernatural powers. Whenever a public calamity is about to occur the ghost of Wallace Saheb is seen restless and wandering about the limits of the camp. Unless ceremonies are performed at the tomb to appease his spirit and avert impending danger, the most dreadful consequences are sure to follow. Life in Bombay' (1852), 282.] About ten years after Colonel Wallace died General Smith tried to stop the yearly endowment of 18s. (Rs. 9). Colonel Wallace's ghost came and troubled him, and General Smith gave back to Dulaba's father the 18s. (Rs. 9) a year and set him in charge of the whole graveyard. Between 1840 and 1850 the Rev. Mr. French tried to stop the worship. It still goes on. At least one kanduri or goat-offering took place in 1883 and on the 24th of June 1884 cocoanuts had lately been offered at the tomb. [Details supplied chiefly by Dulaba through the American Mission Catechist Sirur.]

SUPE.

Supe, on the Ahmadnagar-Satara road thirty-six miles south-east of Poona, is the head-quarters of the Bhimthadi sub-division, with in 1872 a population of 4979 and in 1881 of 4507. Besides the sub-divisional revenue and police offices Supe has a post-office, a Wednesday market, a mosque and a Musalman tomb, and a temple.

Mosque.

The mosque, which is an old Hemadpanti temple of Mahadev, is said to have been built by Aurangzeb (1658-1707). It is on a Plinth three feet high, the pillars rising nine feet from the plinth. It has forty pillars sixteen of them embedded in the back and side walls and twenty-four open. Some of them are carved only in one face and seem to have been pilasters in the Hemadpanti temple. Long beam-like stones are laid on the pillar capitals and the squares thus formed are domed in the usual cut-corner Hemadpanti style. The Musalman tomb, which is outside of the town, belongs to Shah Mansur, an Arab who is said to have come to Supe about 1380 and to have buried himself alive. Beside the. tomb is a mosque and rest-house which is locally believed to have been built by the emperor Akbar (1556-1605). In a square enclosure raised on a plinth of squared stones opposite to the gate on the south is the tomb, on the west the mosque and another building said to be a place of assembly flanking the mosque on the east. The rest of the area is a paved court. The tomb and mosque are whitewashed and are daubed all over with the impression of an open hand smeared with reddish brown. [The hand is lucky or spirit-scaring both among Hindus and Musalmans. The Hindus have the sati's or widow sacrifice's hand on her tombstone, and in Gujarat painted in red on the town gates. Musalmans both Shias and Sunnia worship a hand or *panja*. The Sunnis say it represents the Prophet Muhammad and the four Kaliphas; the Shias say it is the Prophet Ali and his four grandsons. At Musalman weddings the parting guests are saluted by a red hand being slapped on their white coated shoulders. In Bombay (May 1884) a Bhatia's house during the housewarming had the whole front painted with hands. As in the Jewish patriarchal blessing and the Christian laying on of hands the basis of the holiness of the hand seems to be that it is the outlet through which the spirit of blessing passes.]

Inscriptions.

The mosque has four small inscriptions in Persian which may be translated: (1) In the name of the most Merciful God, Muhammad, Husain, Hasain, Ali; (2) There is no God but One, and Muhammad is His Prophet; (3) The foundation of the shrine of Mansur, Araf (the knower of God) laid in the year H. 1108 (A.D. 1695); (4) This is the shrine of Latif Sha'h.

A large fair is held at the *dargha* about October. [Grant Duffs Marathas, 41.] Supe has another tomb of a Brahman who was converted in Aurangzeb's time. The temple of Tukobadev was built by one Annajirav Marathe.

About 1604 the district of Supe with Poona and two forts were granted as an estate to Maloji Bhonsle the grandfather of Shivaji by Murtaza Nizam Shah II. (1599-1631) of Ahmadnagar. [Grant Duff's Marathas,41.]. Malojis son Shahaji appointed Baji Mohite,

the brother of his second wife, as manager of Supe. During his father's absence in the Karnatak Shivaji tried to induce Baji Mohite to hand him over the revenues of Supe. Baji, who held 300 horse, sent civil answers to Shivaji, but refused to pay the revenue without the knowledge and consent of Shahaji. Shivaji baffled by peaceful means resorted to arms. He surrounded Supe at dead of night and took Baji prisoner. [Grant Duff's Marathas, 60-61.] In a revenue statement of about 1790 Supa appears as the head of *a pargana* in the Juner *sarkar* with a revenue of £7582 (Rs. 75,820). [Waring's Marathas, 240.]

TAKVE BUDRUKH.

Ta'kve Budrukh, a small market village on the Andra a feeder of the Indrayani, four miles north-east of Khadkala, with in 1881 a population of 694, has a temple of Vithoba in whose honour a yearly fair or *jatra* attended by 1000 people is held on the fifth of the bright half of *Magh* or January-February. It has a dry weather Monday market.

TALEGAON DABHADE.

Talegaon Da'bha'de, in Maval about ten miles south-east of Khadkala and about twenty miles north-west of Poona is a municipal town with a railway station, and had in 1881 a population of 4900. Talegaon is a half alienated village belonging to the Dabhade family. It has a large pond with temples and tombs, a dispensary, a girls' school, and a large oil industry. The 1872 census showed a population of 5040 of whom 4585 were Hindus, 450 Musalmans, and five Christians. The 1881 census showed a decrease of 140 or 4900, of whom 4410 were Hindus, 485 Musalmans, and five Christians. The 1883 railway returns showed 132,645 passengers and 13,060 tons of goods. The municipality was established in 1866 and had in 1882-83 an income of £245 (Rs. 2450) and an expenditure of £139 (Rs. 1390). The dispensary was opened in 1876 and in 1883 treated ten in-patients and 5609 out-patients at a cost of £66 (Rs. 660).

To the south of the town is a reservoir which has been improved and built round by successive generations of Dabhades, and some small temples of Mahadev line its northern bank. The water in this reservoir and also in existing wells is unfit to drink. Arrangements have therefore been made for building a reservoir to the west of the town which will provide an ample supply of pure drinking water. [Mr. J. G.. Moore, C.S.] To the north of the town in a thick grove is an old temple of Vaneshvar or the Forest God. In front is the bull under a canopy and behind the bull is a square cistern with flights of steps leading to the water. The temple has a battlemented cornice with three small minarets over the entrance. The dome or *Shikaar* over the shrine resemblence the dome of Siddheshwar temple in Khed and has similar snake ornaments. On either side of the temple in enclosed spaces are the tombs or *chhatris* of the Dabhade family, raised platforms, each supporting a tiny shrine, built over the spots where the Dabhades were burnt.

History.

The Dabhade family rose to importance, in the reign of the first Peshwa Balaji Vishvanath (1714-1720). Its founder was Khanderav Dabhade who was appointed commander-in-chief or senapati in 1716. [Grant Duff's Marathas, 196-197.] In 1721 Khanderav died and was succeeded in his command by his son Trimbakrav Dabhade. [Grant Duff's Marathas, 209.] Trimbakrav was an instrument in the hands of Nizam-ul-Mulk who was always ready to thwart the aims of Bajirav I. (1721 - 1740). Bajirav suspected this and when he heard of Dabhade's preparations against the Deccan in 1731, aided by the Nizam, he marched to Gujarat with a small force, met and killed Dabhade and completely routed his force. The victory led to a bitter feud between Bajirav and the Dabhade family. For several days every year the Dabhades used to feed a thousand Brahmans at Talegaon. After the defeat Bajirav continued the practice at Poona and distributed sums of money to learned men. This was the origin of the Dakshina grant which has been continued by the British Government tinder the form of college fellowships and encouragement of vernacular literature. [Grant Duffs Marathas, 224-225. See above pp. 48, 60-62.] In 1779 Talegaon was the furthest point reached by the English army which came to restore Raghunathrav as Peshwa and made the capitulation of Vadgaon about three miles to the west. On the 9th of January 1779, after a short advance, the Maratha army retired under orders from Nana Fadnavis, and set fire to the village of Talegaon. The English feared that Poona and Chinchvad would be burnt in the same way, and instead of advancing to Poona which was only eighteen miles off, in spite of Raghunathrav's advice, they determined to return to Bombay. On the 11th of January the army of 2600 British troops threw their heavy guns into the large Talegaon pond, and burning their stores left Talegaon at dead of night. [Grant Duff's Marathas, 414-416.] In 1817, five days after the battle of Kirkee, two brothers of the name of Vaughan, one of them a Major, in the 15th Madras Native Infantry and his brother in the Marine service, while on their way from Bombay to Poona, were seized at Talegaon and, in spite of their remonstrances and the offer of a ransom, were hanged to a tree by the roadside on the 10th of November. Their graves side by side are about twenty yards off the road. [Fitz Clarence's Journey, 314. It is said that the brothers were first captured Karle, dragged almost naked to Talegaon, and one brother was made to hang other. Fifteen Years in India, 481; Grant Duff's Marathas, 654.] About this side Talegaon is described as a town with a remarkably fine pond and a mango grove. In 1827 Captain Clunes notices Talegaon with 1500 houses, the thief town of the Dhabarry's (Dabhades). [Itinerary, 10.]

TALEGAON DHAMDHERE.

Talegaon Dhamdhere [The town takes its name probably as it was a convenient halting place or camping ground, *tal*. The late Mr. G. H. Johns, C. S. It is called Dhamdhere after the Dhamdhere family who live in it to distinguish it from Talegaon Dabhade to Maval.] on the Vel river about twenty miles south-west of Sirur is a municipal and market town, with in 1881 a population of 3620. The weekly market is held on Monday. Besides the municipality the town has a sub-judge's court, a post-office, and a dispensary. The municipality was established in 1855 and in 1882-83 had an income of £70 (Rs. 700) and an expenditure of £49 (Rs. 490). The dispensary dates from 1876. In 1883 it treated four in-patients and 4724 out-patients at a cost of £57 (Rs. 570).

Temples.

The town has several temples the chief of which are five of Ganpati, Nath, Siddheshvar, Takleshvar, and Uttareshvar. Ganpati's temple was built by a member of the Dhamdhere family. The temple porch is entered on the east and south through large arched openings and has a vaulted roof. The spire is profusely adorned with quaint little figures in niches. Nath's shrine, dedicated to an ascetic of that name, is built on the river bank. Nath is said to have lived in Shivaji's time and to have been a friend of a Musalman saint Itnak Bawa whose tomb is in the Musalman graveyard to the northeast of the town. [According to a local story Nath and Itnak spent their spare time in playing cards.] A fair, attended by about 3000 people, is held on Mahashivratra in February-March. The shrine enjoys rentfree land assessed at £4 18s. (Rs. 49). Siddheshvar's is a large shrine built on raised ground and enclosed by lofty battlemented walls. High flights of steps lead on the east and west into the temple enclosure. The temple is said to have been built by a village accountant of Talegaon who rose to be Sindia's minister. Takleshvar's temple is an old building to the west of Ganpati's shrine. The temple is entered through a curious old resthouse which opens into the market place. Uttareshvar's temple was built by a member of a family called the Mahajans about 200 years ago. To the north of the temple is a fine well and an old lamp-pillar outside the enclosure. Besides these five shrines, outside the town about half a mile to the north-west, is a temple of Bhairay, a quaint old structure enclosed by walls. Its hall or *mandap* is divided into three small aisles by two rows of low stone pillars supporting brick arches. In 1751 Talegaon Dhamdhere was totally destroyed by the Moghals. [Grant Duff's Marathas, 276.]

THEUR.

Theur, a small village of 1034 people in Haveli about thirteen miles west of Poona, has a temple of Ganpati, the chief part of which was built by Chintaman, the second dev or man-Ganpati of Chinchvad, at a cost of £4000 (Rs-40,000). About a hundred years after, nine verandas or galleries were added to the main building at a cost of £4000 (Rs. 40,000) by Madhavrav the fourth Peshwa (1761-1772). The temple is built of cut-stone and consists of a large audience hall or *mandap* with verandas on either side. The external wooden posts were put in by Haripant Phadke a Maratha general. Three more verandas were added to the south of the temple at a cost of £300 (Rs. 3000) by one Bachajipant. In the temple enclosure is a small shrine of Vishnu and a rest-house built by Gandopant a Maratha havildar. Not far from the temple and in the same enclosure is a sacred fig tree for which a plinth was built by Ramabai the wife of Madhavrav Peshwa. The temple of Ganpati enjoys a yearly grant of £208 16s. (Rs. 2088) paid to Shri Chintaman Ganpat Dev of Chinchvad who manages the temple. The temple enjoys two other minor Government grants of £185 6s. (Rs. 1853) for drum-beating and of £1 12s. (Rs. 16) for lighting. Theur was a favourite resort of Madhavrav the fourth Peshwa who died here on the morning of the 18th of November 1772 in the twenty-eighth year of his age. [Grant Duff's Marathas, 352.]

TULAPUR.

Tula'pur in Haveli at the meeting of the Bhima and the Indrayani is a small village of 351 people about sixteen miles north-east of Poona. The village was originally called Nagargaon, but is said to have been called Tulapur or the Weighing Town to commemorate Shahaji's plan of weighing an elephant of the Bijapur general Morarpant, by placing him in a boat, marking the draught of water removing the elephant, replacing his weight with stones and weighing them. [Grant Duff's Marathas,159 note 1. Compare Falkland's Chow Chow, I. 307-308, where the same story is given of Aurangzeb and a ferryman.] In August 1689 Tulapur was the site of Anrangzeb's camp where Sambhaji and his favourite Kalusha were executed. [Grant Duff's Marathas, 159-160. Compare Part II. pp. 238-239.]

URULI.

Uruli, a small village eighteen miles east of Poona, with in 1881 a population of 1587, has a station on the Peninsula railway which is at present the nearest station to the famous temple of Jejuri twelve miles to the south. The 1880 railway returns showed 20,819 passengers and 783 tons of goods. In 1817 Cornets Hunter and Morrison two English officers on the Madras establishment, on their way from Haidarabad to Poona with a small escort, were caught at Uruli. On being waylaid the two officers, whose escort consisted of one havaldar and twelve sepoys, took post in a rest-house and made a breastwork of their baggage. They defended themselves with courage for several hours and did not surrender till their ammunition was spent and the enemy had climbed to the top of the building and was firing on them through holes in the roof. It is worthy of mention, that, though before the attack the officers were offered a safe conduct to the British camp at Poona, they declined to avail themselves of an advantage in which their followers could not share. [Bombay Courier, 16th may 1818. In a general order by the commander in chief, dated Sunday, 11th January 1818, the capture of these two officers is thus alluded to: "This occurrence, while it evinces what may be done, even with a handful of disclipned troops, over a numerous irregular enemy, shows also the injury the public service may suffer at any critical moment by a failure of ammunition. His Excellency embraces this opportunity to order that no guard shall in failure be detached from its corps on any service beyond the frontier without its full amount of spare ammunition, the want of which in the instance above described has forced two brave young officers to surrender in a situation where perhaps they might have maintained themselves until relieved. The loss of the enemy was more than four times the original number of this small party and the commander-in chief desires that his approbation may be expressed to the sepoys who have survised. He has also to express his hope that Cornets Hunter and Morrison may, at no distant date, be restored to liberty and the service, an object which His Excellency will not fail to endeavour by every means to accomplish." Madras Government Gazette quoted in the Bombay Courier of 16th May 1818.] From Uruli the two officers were taken to Poona. In a letter dated 9th November 1817 they stated that though rather roughly used at first they had been well treated since their arrival at Poona. Between December and January they were carried on cots from Poona to Kangori fort about eleven miles south-east of Mahad in Kolaba. At first they were offered nachni bread but refused it. They were then offered rice and refused it also, when they were allowed wheat bread and a fowl a day. Some time after they were

observed corning down the hill on foot under a strong guard. When they had reached the bottom, they were put into litters and carried to a fort about eight miles from Kangori, probably on the way to Vasota fort forty miles south-east of Satara. At Vasota the commandant fed them well, but so close was their confinement, that, till a shell burst over the roof of their prison during the British siege of the fort in April 1818, they had no idea that the English were near, nor till the commandant had decided to surrender, did they know the name of the fort in which they were confined. Before the British took possession, the two officers were allowed to show themselves on the walls, and were greeted by the Europeans of the mortar battery with three cheers. [Bombay Courier, 18th April 1818; Grant Duff's Marathas, 677-678.]

VADGAON.

Vadgaon, on the right bank of the Ghod thirteen miles north of Khed, is a large village with in 1881 a population of 1140. The village has a modern temple of Ramchandra enclosed by high walls. The roof of the hall or *mandap* is elaborately painted with scenes from the Ramayan. The spire is conical ending in a spike and round the base is a row of little domes.

VADGAON.

Vadgaon in Maval three miles west of Talegaon Dabhade and three miles east of Khadkala, is a large village with a railway station twenty-three miles north-west of Poona, a sub-judge's court, a weekly market, and a population in 1881 of 1348. The 1880 railway returns showed 6841 passengers and no goods. The weekly market is held on Tuesday. The village has a temple of Potobadev with a yearly fair attended by about 1000 on the full-moon of *Chaitra* or March-April. The temple enjoys a grant of rent-free land assessed at £1 1s. (Rs. 10½). Near the temple is a small pond. Vadgaon is the scene of the disgraceful convention of Vadgaon where in 1778-79 the commanders of the English army, which had been sent to restore Raghunathrav to the Peshwaship, agreed to give up to the Marathas all the British conquests since 1773 as the price of being allowed to retreat. [Details are given under History, Part II. 263-266.]

VAPHGAON.

Va'phgaon, eight miles east of Khed, with in 1881 a population of 1837, has a weekly market on Tuesday.

VADE.

Va'de, a large market town on the Bhima, twelve miles north-west of Khed, with in 1881 a population of 2758, is held in *inam* by the Dikshit family, and is connected with Khed by a good local fund road. It had a municipality which at the request of the townspeople was abolished in 1872. The only object of interest is a temple of Ram in memory of whose birth a yearly festival takes place on Ram's Ninth or *Ramnavmi* in *Chaitra* or March-April. The town has a Saturday market.

VALHE.

Va'lhe in Purandhar about fifteen miles south-east of Sasvad is a large market town with in 1881 a population of 3626. Valhe has a post-office and a weekly market held on Tuesday. According to a Maratha legend Valhe was the residence of Valmiki the author of the Ramayan. Valmiki is said to have been a Koli and his popular designation in songs and folklore is Valhya Koli. [Grant Duff's Marathas, 11.]

VEHARGAON OR KARLE CAVES.

The great **Veha'rgaon** or **Ka'rle** rock temple lies within the limits of Vehargaon village, about two miles north of the village of Karle thirty-five miles north-west of Poona and about 400 feet above the plain or one-third of the way up the hill sides which form the north wall of the Indrayani valley. From the open ground in front of the temple the flat rice-lands of the Indrayani valley stretch to the south and east sprinkled with trees and broken by deep wooded knolls. Across the valley rises a broken row of steep picturesque hills, the gaps between them filled by the peaks of more distant ranges. The rounded hill most to the east is Kudava, the pointed peak to the west of it Badrasi, then a pair of forts the flat top of Visapur to the east, and to the west the rounded head of Lohogad with the long spur of the Scorpion's Sting. Then a gap in the front range shows the distant peak of Tung and further west stretches the flat plateau of Sakarpathar with in the distance the lofty rugged outline of the Morgiri or Jambhulni hills.

Ekvira's Temple

The first building at the mouth of the great rock temple is the small stone tomb or samadhi of some modern ascetic. Further on a stone archway with a music room [The musicians are Poona barbers or Nhavis who state that Ekvira's shrine was endowed with a band of musicians by one of the Peshwas about four generations ago. There are eleven men two of them bandmasters or *jamadars* among whom a montly allowance of £4 19s. 3d. (Rs. 49 %) is shared. They play four times a day, at midnight, daybreak, noon, and sunset. The instruments are two big-brass drums called *naubats* or *nagaras* and two small iron drums or jils, two brass trumpets, a bigger Karna and a smaller ture, and a brass gong struck by a wooden mallet, a pair of cymbals made of kase or bellmetal, and two wooden pipes or sanais.] overhead leads on the right to Ekvira's temple a small bomed building on a high plinth of cut-stone. An inscription on the west wall states that it was built in February 1866 (Maha-Shud 5, S. 1788). [The inscription runs: Shri Ekviri Bhavani's old temple built for religious sake by Naga Posu Varlikar and Harippa Charnavir, Fajandar of Bombay, in consultation with Baburav Kulkarni on Maha Shud 5th, S. 1788 (February - March, 1866).] According to the local story an older temple stood for four generations on the same site. The people know that the worship of the goddess dates from much earlier times. They do not know whether it is older than the Pandavs and the great rock temple. At the top of the steps that lead to the plinth stands an iron arch hung with a row of nine bells Most of the bells are of native make, but the largest, a very sweet-toned bell, is English and bears the date 1857. All of them have been presented to Ekvira by Thana Kolis and Prabhus. [The large central bell has a

roughly cut inscription stating that it was gives to Shri Bhavani Devi by Bandhanar Jivan Padam Koli and Dhondu Koli Thankar on *Chaitra Shud Ashtami* S. 1790 (April 1868).]

Inside of the doorway, the main hall of the temple is paved with stone and has a domed roof from which hang two rows of lamps and glass coloured balls. On the walls are some modern coloured paintings of Devi. Opposite the entrance is the shrine door with an arched blackwood frame and pannelling of thin open brass bars. Inside on a low four footed brass table stand the brass vessels that are used in the temple service and a small brass pillar on which a lighted oil saucer burns night and day. Cut in the rock behind the worship vessels is the image of Ekvira a human face so distorted by layers of redlead that the cheek-bones stand out almost to the level of the nose-bridge and the mouth seems sunk like the toothless jaws of an old woman. The eyes, which are of silver the white covered with white enamel or *mina* and the pupils with black enamel, have a wild inward squint. The shoulders are draped in a robe and bodice, of which the goddess has five or six sets, some of them plain and others rich with gold thread and silk. She has also earrings, silver for every-day wear and gold for high days, a pearl nosering, two necklaces of gold sequins, and two masks one of gold the other of silver, which she wears during her great festival time in March and April (*Chaitra shud Ashtami and Purnima*).

The temple funds are managed by a council or panch, and a ministrant or pujari. A Karhada Brahman, with a yearly salary of £6 17s. (Rs. 68½), waits on the goddess for two hours every morning. According to the local story this endowment and the appointment of ministrant were given to the family of the present holder by Nagoram a Brahman of Rahuri who repaired the temple four generations ago. Before that the office of ministrant was held by a family of Guravs. At present the service is divided between the Brahman and the Gurays, the Brahman waiting on the goddess and the Gurays cleaning the temple and performing other minor offices. The Guravs are supported by the every-day offerings, the Deshmukh having a right to all offerings made during the great month of Chaitra or March-April. On the two chief April days, the day of no-moon and the day of full-moon, the temple is visited from 5000 to 6000 worshippers. About fourfifths of them come from the Konkan, fishing Kolis, Prabhus, Brahmans, and Sonars. Ekvira is the Kolis' *Kuldevi* or family goddess and they come in parties, each family bringing in a palanquin its goddess, a silver mask of Ekvira. Those who have made vows offer cocks and goats employing a Musalman Mula to cut the victims' throats outside of the temple. The offerers eat the flesh of the victim except that when the victim is a goat, the *patil* or the *deshmukh* has a claim to the head. The chief interest of this small temple is that, as the name Ekvira is apparently the Dravidian Akka Aveyar or the worshipful mother, it would seem to be older than the great Buddhist temple, perhaps its local fame was the cause why this hill slope was chosen as the site of the temple. [The usual derivation of Ekvira is that she was so called because she was the mother of the one hero Parshuram. In connection with the Dravidian origin of the shrine it is noticeable that the names of the latest rebuilders of the temple are Dravidian apparently Bombay Kamathis.] Though all local remembrance of Buddhism is buried under the Brahmanic tales about the Pandav brothers some connection is still kept between Ekvira and the old Buddhist rehc-shrine which the people call the throne of king Dharma the eldest of the Pandav brothers. If their wish is granted, people promise to walk a certain number of times round Ekvira's shrine. But as Ekvira's image is out in the hill side they cannot walk round it. So on the March-April high days, a large arched wooden frame with a revolving paper lantern in the centre, is set in the body of the rock-temple six or seven yards in front of the relic-shrine. Those who have made a vow to Ekvira make the promised number of circles round the relic-shrine which is in good repair and has the words Dharma Raja painted across the base of the tee that crowns the dome.

Cave Details.

The caves consist of a large chapel or *chaitya* cave and several dwelling caves or *viharas* some of them much ruined. The chapel cave is, without exception, the largest and finest of its class. The cave resembles, to a great extent, an early Christian church in its arrangements, consisting of a nave and side aisles, terminating in an apse or semi dome, round which the aisle is carried. The general dimensions of the interior are 124 feet 3 inches from the entrance to the back wall by 45 feet 6 inches in width. The side aisles, however, are very much narrower than in Christian churches, the central one being 25 feet 7 inches, so that the others are only 10 feet wide including the thickness of the pillars.

"Fifteen [Dr. Fergusson in Cave Temples of India, 236. The 8th pillar on the right is 16sided, having, in basso relieve, on the central north face a small chaitya'; on the right a wheel on a support, with two deer at the foot; and on the left, adjacent side, a mall representation of the lion-pillar.] pillars on each side separate the nave from the aisles; each pillar has a tall base, an octagonal shaft, and a richly-ornamented capital on which kneel two elephants, each bearing two figures generally a man and a woman, but sometimes two females,[On the sides next the aisles are horses with single riders on each, but as is usually the case with the horse they are badly proportioned and ill executed.] all very much better executed than such ornaments usually are. [Beginning from the inner end on the east that is next the *daghoba* the first of the right row of pillars has on the east end a ram with feet like a horse and a tail like a tiger; the second pillar on the east a horse with dew caps and an ordinary horse; the third pillar has a horse on the east and a sphinx on the west; the fourth a horse east and a bull west; the fifth a horse east and a horse west; the sixth a horse and a horse west; the seventh a horse east and a bull west; the eighth two horses the ninth a horse east and a bull west; the tenth two horses; the eleventh a bull east and a horse west; the twelfth two horses; the thirteenth two horses; the fourteenth a bull east and a horse west; the fifteenth both elephants. Over the west side of the fourteenth pillar a woman's figure is cut between the horses. The inside figures on the left row of capitals are on the fifteenth or next the door, a bull west and a horse east; on the fourteenth a bull west and a horse east; on the thirteenth a bull west and a horse east; on the twelfth a bull and a horse; on the eleventh a bull or buffalo and a horse; on the tenth a bull and horse; on the the a ball and horse; on the eighth a bull and horse; on the seventh a bull and horse; on the sixth a bull and horse; on the fifth a bull and sphinx; on the fourth a bull and horse; on the third a horse and bull; on the second a horse and bull; and on the first two horses. On the east side of the second pillar are a couple of dancing male and female figures] The seven pillars behind the altar are plain octagonal piers without either base or capital, and the four under the entrance gallery

differ considerably from those at the sides. The sculptures on the capitals supply the place usually occupied by frieze and cornice in Grecian architecture; and in other examples plain painted surfaces occupy the same space. Above this springs the roof, semicircular in general section, but somewhat stilted at the sides, so as to make its height greater than the semi-diameter. It is ornamented, even at this day, by a series of wooden ribs, probably coeval with the excavation, which prove beyond the shadow of a doubt that the roof is not a copy of a masonry arch, but of some sort of timber construction which we cannot now very well understand."

Immediately under the semi-dome of the apse is placed the *daghoba*-in this instance a plain dome on a two-storeyed circular drum-similar to the Bedsa relic-shrine, the upper margins of each section surrounded by the rail ornament, and just under the lower of these are a series of holes or mortices, about six inches deep, for the fastenings of a covering or a woodwork frame, which probably supported ornamental hangings. It is surmounted by a capital of the usual form, very like that at Bedsa, and on this stands a wooden umbrella, much blackened by age and smoke, but almost entire. The canopy is circular, carved on the under surface, and droops on two sides only, the front and rear, the seven central boards being as nearly as possible in one plane, and those towards the front and back canted each a little more than its neighbour.

In the top of the capital, near the north-west corner, is a hole about ten inches deep, covered by a slab about ten inches square and four inches thick, doubtless the receptacle for the relic, which however has been removed. Round the upper edge of the capital are mortice holes, eight in number or three to each face, by which some coronal or other ornament was attached.

"Opposite this," to continue Dr. Fergusson's account, " is the entrance, consisting of three doorways under a gallery, exactly corresponding with our rood-loft, one leading to the centre and one to each of the side aisles; and over the gallery the whole end of the hall is open as in all these *chaitya* halls, forming one great window, through which all the light is admitted. This great window is formed in the shape of a horse-shoe, and exactly resembles those used as ornaments on the facade of this cave, as well as on those of Bhaja, Bedsa, and at Kondane, and which are met with everywhere at this age. Within the arch is a framework or centering of wood standing free. This, so far as we can judge, is, like the ribs of the interior, coeval with the building; at all events, if it has been, renewed, it is an exact copy of the original form, for it is found repeated in stone in all the niches of the facade over the doorways, and generally as an ornament everywhere and with the Buddhist 'rail,' copied from Sanchi, forms the most usual ornament of the style.

"The presence of the woodwork is an additional proof, if any were wanted, that there were no arches of construction in any of these Buddhist buildings. There neither were nor are any in any Indian building anterior to the Muhammadan conquest, and very few, indeed, in any Hindu building afterwards.

"The outer porch is considerably wider than the body of the building, being 52 feet wide by 15 feet deep, and is closed in front by a screen, composed of two stout octagonal

pillars, without either base or capital, supporting what is now a plain mass of rock, but which was once ornamented by a wooden gallery, forming the principal ornament of the facade. Above this a dwarf colonnade or attic of four columns between pilasters admitted light to the great window, and this again was surmounted by a wooden cornice or ornament of some sort, though we cannot now restore it, since only the mortices remain that attached."

The veranda of the great cathedral cave had two eight-sided pillars and two pilasters. Inside of this on each end was a rail and above the rail three elephants. Above the elephants is a second railing into which have been let later seated Buddhas of about the fifth or sixth century, then a plain belt of stone with inscriptions, [See below p. 460.] then a railing, above this two temple doors and two couples men and women dancing, those on the right specially well formed and carved. Above the dancing couples is a plain band, then a rail, then two windows and two doors, again a rail, then two windows and two doors, again a rail, and, above the rail, two windows and two doors, then top rail and roof smooth and well dressed.

In the back wall of the veranda is a central and two side-doors with horseshoe arches over each. On each side of the central doorway are a pair of male and female figures naked to the waist. The couple on the visitor's right are standing, the woman with her left leg turned behind her right leg and her hands broken. The man has his hand on her right shoulder. The woman has heavy anklets and a waistband hanging to her knee. Her right arm is broken above the elbow; her left arm is passed behind the man. The woman has heavy earrings. Her hair is plain and drawn far over her brow and there a is large round brow-mark. The man has his hair piled in ascetic or *jata* coils rising into a central cockscomb. He wears heavy earrings and a waistband hanging to his feet. To the visitor's right of the pair is a Buddha with an aureole and seated on a lotus throne supported by two Nagas. On each side are small figures. On each side of Buddha is a mace-bearer and a flywhisk-bearer and above them two corner figures. To the right is another man and woman much like the other pair.

Below the original rail has been cut into a group of figures, a seated teaching Buddha in the centre, two side supporters and two small cherubs in the corner above. Further east, at the end of the recess, are two fignres. The man on the right has a big turban, five bracelets on the right hand, and his legs as if he was walking. The woman has many bracelets on her arm, a necklace with a central pendant like a Lingayat box, double anklets, and crossed legs the right leg in front. To the left of the central door the first figure is a woman who stands with her feet crossed and her arms thrown up clasped palm to palm over her head with long gloves up to her elbow. Her earrings are elaborate and her necklace falls in a stomache. The man on the visitor's left has a bunch in his left hand held over his shoulder. He has three plain bracelets and his left right hand hanging by his side holds his waistband. To the left in a square frame is a- central standing Padmapani, his right hand blessing and his left hand holding a lotus. He stands on a lotus throne and on either side are small worshipping figures. On each side of Padmapani are two figures. In the corners above are two small sealed Buddhas both teaching. Above are two Buddhas with a mace-bearer below. To the left are a big pair. On the visitor's right is a

man with his left hand held up and open, his hair in the ascetic rolls. His waistcloth is tied in a brow on his left hip. His right hand is on the woman's shoulder. The woman, who is naked to the waist, stands leaning a little to the left with the left knee bent against the right knee. She wears a plain flat headdress which fits her head tightly, large earrings, and a heavy necklace that falls between her breasts. Her left hand rests on her left hip and her right hand falls by her side. Her lower arm is covered to the elbow with heavy plain bracelets.

Below this belt of figures is the Buddhist rail, part of which about four feet broad on the left, has been cut into a group with a seated snake-canopied Buddha in the centre. Above are two small floating figures and side attendants with single snake-canopy. Above the main frieze of figures is a belt of two groups, the Buddha to the left thinking, the Buddha to the right teaching, and with flywhisk bearers at each side. The left or thinking Buddha sits under an arch, the right or preaching Buddha has a great aureole. Above is a plain belt of rook with inscriptions [See below pp. 460-461.] and above that a rail. Then there is the great central horseshoe arch with the side space filled with cave door and window carvings.

At the left end of the veranda at the foot is a Buddhist rail, then three well-carved broken trunked elephants with excellent ears and expressions. Between the centre and the west elephant a group of a seated teaching Buddha with side flywhisk bearers is carved on the back wall. Above the three elephants was originally a three feet broad belt of Buddhist railing cut into three groups of thinking Buddhas with side supporters. The back wall of the veranda has at the foot a central and two side doors and three bands of Buddhist railings, one close to the ground, a second on a level with the top of the doors, and the third on a level with the top of the arch. The lowest rail was the biggest. Below the top rail was a plain belt of rock. The space between the second and the third railing was originally plain. The lowest rail was given by two men and there is an inscription above it to say so. On the left is a defaced inscription. [See below pp. 460-461.]

On each side of each of the doors is a male and female figure. On the visitor's left is a man and woman in the S'atakarni style of dress with many ornaments and a broad waistbelt. Perhaps the inscriptions above the north or right pair and above the pair on the front wall are of about the same time. [See below pp, 460-461.]

The doorways were made about the same time. The images cut in the central railing are of the fifth or sixth century and below the group is a teaching Buddha and above two angels bringing a crown. A man worships a tope. Below are two deer. At the lower right corner the female figure with the high headdress is probably the woman who got the group carved. The mortar work round the central door is Maratha made by a landholder named Anna Goitrikar about 1780.

At the north or left end of the veranda at the foot is a railing, then three elephants with broken tusks, then a rail which has been cut into three groups of Buddhas. The left group is unfinished. The groups belong to the Great Way or Mahayan style and have, instead of flywhisk bearers, Bodhisattvas probably of about A.D. 400-500. Above is the original

inscription of the maker of the cave. Above this is a band of rail pattern, then two temple doors with two well carved groups of men and women. Above this all the work is as it-was originally cut, four rows of church fronts each separated from the next by a railing, the three topmost without figures. The groups of dancing men and women in the lower friezes are well carved.

In front of the outer screen stands the Lion-pillar, a plain slightly tapering sixteen-sided shaft, surmounted by a capital of the same style as those in the portico at Bedsa. On this stand four lions, their hinder parts joined, but there is no hole or mortice to lead us to suppose that any emblem in metal or wood was raised over them. The pillar stood on a raised circular basement or drum, carved with the rail-pattern, but now defaced. There are indications that render it more than probable that, as at Kanheri and Kailas at Elura, there was a corresponding pillar at the opposite side, the base of which is covered by the modern Ekvira temple. The cap of the existing pillar is connected with the screen-wall by an attachment of rock, in which is cut a large square mortice; and over the modern temple, on the south side, there remains two-thirds of a corresponding attachment with a similar mortice, as if to hold a beam horizontally across eighteen inches in front of the screen. The other pillar doubtless supported the *chakra* or wheel the emblem of the law.

Inscriptions.

In the veranda and body of the great chapel cave are nineteen; inscriptions.

Inscription 1.

On the left end of the veranda on a deep flat moulding over the heads of three large elephants is inscription 1 which records:

"Seth Bhutapa'la from Vejayanti has established a rock-mansion the most excellent in Jambudvipa."

Inscription 2.

On the lion-pillar or Sinhastambha on the left of the entrance is inscription 2 which records:

"From Agimitranaka, son of Goti, a great warrior, a Maratha (P), the gift of a lion-pillar."

Inscription 3.

On the right end of the veranda below the feet of the elephantti is inscription 3 which records:

"The gift of, first, two elephants, and above and below the elephants a (rail-pattern) moulding by the venerable reverend (bhadanta) Indadeva."

Inscription 4.

Over the right-hand side door is inscription 4 which records;

"The gift of a door by Sihadata, a perfumer, from Dhenuka'kata."

Inscriptions 5 & 6.

A pillar of the open screen in front of the veranda has two. inscriptions 5 and 6. The upper inscription 5 records:

"The gift of Bha'yila the mother of Maha'devanaka, a house holder." (Vejayanti is probably Banavasi in North Kanara. Compare Bombay Gazetteer XV. Part II. 77, 264.) and the lower inscription 6 records:

"Sa'mika, son of Venuvasa, a carpenter, a native of Dhenuka'kata, made the doorway, and above the door."

Inside, on the left hand fourth pillar is inscription 7 which records:

"The gift of a pillar by Sihadhaya, a Yavana, from Dhenuka'kata."

Inscription 8.

On the left or north side of the nave on the shaft of the fifth pillar is inscription 8 which records:

"The gift of the cost of a pillar by Sa'timita, from Sopa'raka, out of respect for his maternal uncle the Bhadanta Dhamutaraya, by his (*i.e.*, the Bhadanta's) disciple and sister's son Satimita, the son of Nanda', with his mother and father."

Inscription 9.

Below inscription 8 in clear-cut letters is inscription 9 which records:

" The gift of a pillar containing relics, by Sa'timita, from Sopa'raka, sister's son of Bhadanta Dhamutaraya."

Inscription 10.

On the same side on the shaft of the third pillar is inscription 10 which records:

"(The gift of) of Dhama, a Yavana from Dhenukakata."

Inscription 11.

On the same side on the shaft of the seventh pillar is inscription 11 which records:

" The gift of a pillar by Mitadevanaka, son of Usabhadata from Dhenuka'kata."

Inscription 12.

On the inner face of the gallery is inscription 12 which records:

" (Gift) of Asa'dhamita', a nun"

Inscription 13.

Outside on the upper frieze to the right of the central door is inscription 13 which records [Compare Bombay Gazetteer, XVI. 569-578.]:

"To the Perfect. Usabhadata, son of Dinika and son-in-law of the king Khahara'ta Khatapa Nahapa'na, the giver of 300,000 cows-having given gold, and being a visitor to the tirth at the Bana'sa' river; the giver of sixteen viliages to gods and Bra'hmans; at the holy place Fabha'sa the giver of eight wives to Bra'hmans; and who caused 300,000 cows to be given; and who at Valuraka gave the village of Karajaka to the Sangha of ascetics from the four quarters residing in the lena, all dwelling there for the support during the rainy season."

Inscription 14.

To the left of the central door and over the sculptures is inscription 14 which records:

"King Va'sithiputa, the illustrious lord (Sa'misiri) [Puluma'yi] in the year seventh (7), of summer the fifth (5) fortnight, and first (1) day. On that day Somadeva, a great warrior, the son of Vasithi and of Mitadeva the son of Kosiki, a great warrior of the Okhala-kiyas, gave a village to the Sangha of Valuraka. This gift is for the repairs of the Valuraka Lenas."

Inscription 15.

Over the male and female figures to the right of the right of the right-hand side door is inscription 15 which records:

"Gift of a pair by the Bhikshu Bhadasama"

Veluraka appears to be the ancient name of the monastic establishment at Karle.

Inscription 16.

Over another pair of figures on the inner side of the right end of the outer screen or front of the veranda is inscription 16 which records:

"Gift of a pair by the Bhikshu Bhadasama" [Valuraka appears to be the ancient name of the monastic establishment at Karle.]

To the left of the central door on a piece of rail-pattern carving below the sculptures is inscription 17 which records:

"..... the gift of a vedika by the mother of Samana'"

Inscription 18.

Low down and to the right of the central door is inscription 18 which records:

"The gift of a vedika' (rail-ornament) by the nun Kodi mother of Ghunika. Made by Nadika."

Inscription 19.

Just over an image of Buddha inserted at a later date between the central and right-hand door is inscription 19. It is dated the 19th year of Vasisthiputra's time, and records a benefaction to the Bhikshus by the talukdar of Mamala, the modern Maval. [Archological Survey of Western India No. 10, pp. 28-36.]

On the north-west of the Lion-pillar are some cells, and a water-cistern, into which a *daghoba* that had stood on the roof of it has fallen. North from this is a large excavation, more than 100 feet in length, but very irregular: it apparently consisted of two or three *viharas*, in which all the dividing walls have been destroyed. At the north end of it are several cells, still nearly entire, three water-cisterns, and a small relic shrine or *daghoba*.

Above these is a *vihara*, about 28 feet by 27 and 8 feet high, with four cells in each side and five in the back, six of them with benches or beds of stone as in most of the older *viharas*, and in one is a ladder up to a stair leading to the cave above. The front of this cave, however, has given way. Still higher in the rock, and reached by a stair from the preceding, is another *vihara*, 34 feet 6 inches by 48, but not quite rectangular, and 8 feet 11 inches high. It has three cells in the right end and five in the left, with six in the back. Across the loft end is a raised platform about 8½ feet broad and 18 inches high, along the front of which there seems to have been a wooden railing or screen. On the east and south walls are two sculptures of Buddha, evidently of much later workmanship than the cave. The front wall is pierced with four openings, and the veranda 40 feet 10 inches long, 7 feet wide, and 12 feet 3 inches high, has a low screen-wall in front, on which stand four columns between pilasters. Outside this screen, at the north end, is a water-cistern, and along the front a balcony.

Further north (the lower part of the stair broken away), is another *vihara* above those first mentioned. It is about 38½ feet long and 17 feet deep, with two cells in each end and four in the back, five of them with stone-beds. In the front wall are a door and two windows,

but the corridor of the veranda has given way. On the east wall of this cave is inscription 20 which records:

Inscription 20

"To the perfect! The king V'asithiputa the illustrious (siri) Pulima'vi, in the year (of his reign) twenty-four (24), in the third (3) fortnight of the winter (hemanta) months, the second (2) day. This meritorious gift of a nine-celled mandapa by the (Upa'saka) layman Harapharana, son of Setapharana, a Sovasaka, native of Abula'ma, [Probably Obollah at the head of the persian Gulf. Compare Bombay Gazetteer, VII 421 note. 2] for the possession of the Sangha of the Maha'sanghas from the four quarters. For the continuance in welfare and happiness of father and mother and all people and living things. Established in the twenty-first year, and with me Budharakhita and his mother an Upa'sika'. And in addition the meritorious gift of another passage by the mother of Budharakhita".

Inscription 21.

In a recess over a water-cistern at the end of the next cave is inscription 21 which cannot be translated. The sense runs:

"In the fifth year and of the Hemanta-paksha (of some king possibly puluma'yi), the female disciple of (some) Bhadanta, gave a lena; and a sister's daughter a Sra'vika' (or laic)-gave a cistern for the sangha of ascetics. [With the donor several other names of relations are associated (but obliterated) with Usabha, a female disciple."]

To the south of the *chatiya* cave there are also a number of excavations, the first being an unfinished hall about 30½ feet wide by 15½ feet deep. The next is a small room 6 feet by 7½ and 6 feet high, of which the front is broken away, with a figure of Buddha on the back wall. Close to this is a water-cistern, and beyond it a *vihara*, 33 feet 3 inches wide by 32 feet 10 inches deep and 9 feet 5 inches high with four cells (without beds) in the back, three in the left end and two unfinished ones in the right, all having their floors about a foot higher than that of the hall. In the middle of the back wall is a figure of Buddha, seated with his feet resting on a lotus, under which is the wheel between two deer, and behind this are two small worshipping figures. On each side are fly whisk bearers the one on his right holding a lotus stalk in his left hand, and over their heads are *vidyadharas* or heavenly choristers. This hall bears evident marks on the floor, ceiling, and side walls, of having been originally only 21 feet 6 inches deep, but afterwards enlarged.

The front wall is pierced by a door and two windows, and the veranda, 25 feet long by 6 feet 4 inches wide, has a cell at the north end and two octagonal pillars between pilasters in front, each pillar being connected with its adjacent pilaster by a low parapet or screen which forms the back of a bench on the inside, and is divided outside into four plain sunk panels, similar to several at Pal near Mahad in Kolaba, cave VI. at Ajanta and others. To the entrance the approach has been by a flight of steps. Beyond this is a small unfinished

room, and at the turn of the hill, facing south, is another, 8 feet 5 inches by 9 feet and 7 feet high, with a bench along part of the east wall. The front has gone, but on the wall under the caves is a fragment of an inscription (22) which records:

Inscription 22.

"To the Perfect. The meritorious gift of the ascetic Budharakhita."

A little to the east, and about 5 feet above the footpath, is another cave, 14 feet 5 inches by 13 feet 4 inches and 6½ feet high, with a cell in the left wall having a bench or bed. Beyond this is a small water-cistern.

Hill Top.

From the right side of the great cave a rough path clambers about two hundred feet up a bare rocky face to the flat top of the spur. This, which, except a very old and gnarled *umbar* tree at the end, is bare and baked, has the remains of three buildings and towards the west a slight hollow with the earth-filled mouth of an old water cistern. The building most to the end of the spur seems to have been square about 17' x 14' and of brick. It was probably either a rest-house or a temple. About thirty yards to the north, along the bare top of the spur, the ground rises about 550 feet above the Karle bungalow into a mound of rough undressed stones brick and earth 39' north and south about all earth and stone except on the west or weather side. The stones are not dressed but flat and like big bricks. The earth or clay is very stiff. The height is about nine feet above the ground that slopes to the west. A few yards further north is the site of another brick building probably a *stupa* most of which has been removed. The top of the mound is 550 feet above the Karle bungalow. About fifty yards further north is a flat rock which was perhaps roughly carved into a seat.

In the hills near Karle are a number of cells and rock cisterns. Thus in the hill above Devgad a little to the south-west of Karle is a half finished *vihara* or dwelling cave with two roughly hewn square pillars in front with bracket capitals and in the back of the cave a door has been begun as if for a shrine. In the rising ground to the east of the village is a rock-cut pond and some cuttings as if intended as the beginning of a small cave and cistern.

Again, on the south side of the village of Sheletana is a large covered rock cistern, originally with six openings, and high up the hill to the north is a large cavern under a waterfall. In the north side is a round hole which has been fitted with a cover, and was perhaps intended for storing grain. Beside this is a small circular chamber which may have contained a structural relic-shrine or *daghoba*. The roof of the cave has fallen in, and there has been a great flaw in the rock, which perhaps led to the cave never being finished. At Tankve still further east are two rock cisterns, and above Valak in the face of the scarp is a small round cell as if for a relic-shrine and near it a cave without front, a slightly arched roof and a cell at the back, with a round hole near the entrance, possibly a place for holding stores. A flaw in the rock has destroyed the back of this excavation. At

Ayara to the east of Bhaja and in several places to the north-east of Karle there are also excavations mostly single cells for hermits. [Cave Temples of India, 242."]

VIR.

Vir, about eight miles south west of Jejuri in Purandhar, is a large village with in 1881 a population of 2715. At Vir are the headwords of the Nira canal [Details of the Nira canal are given under Agriculture, Part II. pp. 20 - 24.] and it has a temple of Mhaskoba, a modern Kunbi god, which enjoys about four acres of rent-free land assessed at £3 10s. (Rs. 35). A yearly fair, lasting for nearly a fortnight and attended by 8000 to 10,000 persons, is held at the temple on the full-moon of *Magh* or February-March. The temple devotees, who are called Virs or heroes, perform a sword dance before the god and in their enthusiasm often wound themselves and each other. About 1834 an excited Dhangar put the hilt of his sword on the ground and its point to his navel, and, falling on it, gashed his bowels so that hedied. [Oriental Christian Spectator, VIII. (1837), 133.]

YEVAT.

Yevat, on the Peninsula railway twenty-six miles east of Poona, with in 1881 a population of 1539, has a station with to its south a travellers' bungalow. The 1880 railway returns showed 12,014 passengers and no goods. The Khadakvasla canal flows close to Yevat and there is also a large storage pond called Matoba which irrigates a considerable extent of land and is fed by the canal in the neighbourhood. [Mr. J. G. Moore, C. S.]

APPENDIX

GUNPOWDER FACTORY.

THE following details on the ingredients manufacture and examination and proof of Gunpowder have been contributed by Lieutenant-Colonel Wake, R. A.:

Saltpetre Refining.

The refining of saltpetre is based upon the fact that saltpetre is far more soluble in hot than in cold water, while the chief saline impurities found in grough saltpetre are almost equally soluble in either. Water at 212° holds about seven times as much nitrate of potash or pure saltpetre in solution as water at 70°. If, therefore, a saturated solution of saltpetre be made at a temperature of 212°, and the chlorides of sodium and potassium are contained in the liquor, as the solution cools to 70°, six-sevenths of the nitre contained in it will be deposited in the form of crystals, which can easily be removed, whereas the foreign salts will still remain in solution.

Solution.

Two large refining coppers, each capable of holding about 500 gallons are charged with saltpetre and water in proportions so that when boiled the whole of the saltpetre may be dissolved. The boiling is performed by steam forced into the coppers through a perforated pipe running round the interior of the coppers near the bottom. In the process of boiling a good deal of scum is found on the surface of the liquid which is skimmed off from time to time. To assist it in forming, a little glue is thrown in when the water begins to boil. By the time the scum has been cleared off, the solution will be ready for filtering, when a valve near the bottom of each copper is opened which allows the liquid to run out. Through this valve it passes to a range of canvas filter bags or *daulas* which catch all insoluble impurities. Up to this point the liquid is kept as hot as possible, to carry as much of the pure saltpetre in solution through the filters as practicable. Care is also taken that the solution is not too thick or it will not run easily through the filters. To ensure this the specific gravity of the solution should be about 1.49. The solution now free from all its insoluble impurities runs from the filters into large flat copper coolers called crystallizing pans.

Crystallizing.

The crystallizing cisterns, or coolers, are each twelve feet square and about eleven inches deep, and the solution from five to six inches deep. The liquid is kept in agitation with a long handled wooden hoe, and as it cools fine crystals fall to the bottom of the cistern. If not kept in agitation, large crystals would form, which would enclose the liquid containing the impurities still in solution. The crystals are from time to time drawn up to one side of the cistern, the bottom of which is raised so as to form an inclined plane to receive it. From this the liquor drains off, and the crystals looking almost like snow, and technically called flour, are then raked into the washing cisterns. The solution in the crystallizing cistern is not stirred, nor are the crystals removed, after the temperature falls below 100°, as the crystals are then deposited so slowly, but it is left to cool, when large crystals form which are treated as rough nitre.

Washing.

The washing cisterns are about six feet long, four feet wide, and three feet six inches deep, and are fitted with a false bottom of wood pierced with holes. In front below the false bottom is a plug hole. The cistern being now nearly full of saltpetre, distilled water is poured from a rose above each cistern enough to cover the saltpetre, and is allowed to stand in the cistern from half an hour to one hour, after which it is run off from a tap at the bottom. This is repeated by another washing, but now the water is not run off till next morning. If not enough, a third washing is sometimes given. The saltpetre is now ready and placed in the store bins. A solution of the saltpetre should now be tested as follows:

Testing the Saltpetre.

(a) With blue and red litmus paper for acids or alkalies; (b) with a few drops of the solution of nitrate of silver for the presence of chlorides, a milky appearance indicating the formation of the insoluble chloride of silver, this is a very delicate test; and (c) with a

solution of chloride of barium for the presence of sulphates, which would give the insoluble sulphate of baryta. The refining operation over, there remains saltpetre in the crystallizing coolers, which has formed into large crystals since the stirring of the liquid ceased, and which contains impurities. This is used as grough in the next day's refining. There is also a large quantity of liquid, more or less impure, containing saltpetre, both in the crystallizing coolers and in the tank into which the water used from the washing vats has been drained.

In other Gunpowder factories the collection of the saltpetre in this liquor forms an important and expensive part in the process of refining, and is effected by boiling down the liquid (amounting to from 600 to 800 gallons) to about a quarter of its original bulk, when the remainder is run through filters into pans and collected. When it has crystallized the saltpetre so collected is used as grough during the next day's refining.

The boiling down of such a large quantity of liquid consumes a great deal of fuel, and adds much to the expense of refining. To avoid this advantage has been taken here of the dry climate of the Deccan, and the whole process of evaporation is carried on without expense by pouring the water into a large empty masonry reservoir (which it covers to the depth of about an inch), and letting it evaporate of itself. This it does in from twenty-four to forty-eight hours according to the time of the year; the saltpetre contained in it forming in crystals during the process and being afterwards collected and used as grough on the next day's refining. This plan is not practicable in the rains, but enough saltpetre can be refined during the dry months to last through the monsoon till evaporation can again be carried on.

The extraction of saltpetre from powder sweepings and from damaged powder is a process which has to be carried out in all Gunpowder factories. As usually effected it is a very dirty troublesome and expensive operation. The saltpetre contained in condemned gunpowder, and also in the sweepings from the factory, is extracted by boiling with water in coppers holding about 400 gallons each, and filtering the solution first through coarse canvas and a second time through daulas. The liquor containing the saltpetre is then evaporated down, filtered, and crystallized in pans as before. The charcoal and sulphur left in both sets of filters is again boiled before being thrown away. About 91 per cent of the saltpetre contained in powder can be recovered by extraction, against the value of which must be set the cost of labour and fuel. At this factory however the operation is very simple and inexpensive. The process consists of putting the powder sweepings or damaged powder into large porous earthenware vessels which are then filled up with cold water. This water filters through the vessels into copper troughs in a few hours, taking with it as much saltpetre as cold water can hold in solution. A fresh quantity of water is poured into the vessels every morning for about a week, by which time nearly all the saltpetre has been extracted. About two per cent. of the saltpetre remains unextracted with the sulphur and charcoal in the vessels. All the water is then poured into the reservoir to evaporate and within twenty-four hours the crystals of saltpetre can be collected and are afterwards used as grough saltpetre.

Charcoal Burning.

As a general rule the wood should be cut when the sap is up, as it can be then most easily stripped of its bark, but in the case of Cajanus indicus or tur wood it is cut when the crop is ripe and has to be soaked in water before the bark comes off easily. The wood yields about one-fourth its weight of charcoal. Being cut into lengths of three feet, the wood is packed into iron cylindrical cases called slips, which are three feet six inches long and two feet four inches in diameter, care being taken that the wood is as much the same size as possible. The lid is fastened on, two openings being left in the slip at the bottom of about four inches in diameter. The slips are then placed in horizontal cylinders or retorts, the end with openings (one below and the other above) first. The retorts, which have openings at the far end to correspond with those in the slips, are closed by tight-fitting iron doors. The retorts are built into the wall, with furnaces so arranged underneath as to admit of the accurate regulation of heat throughout the operation of charring. This occupies about four hours for R. F. G., eight hours for R. F. G. 2, and two or three hours for cannon powders. The flames surround the retorts, the heat acting as nearly as possible on the whole surface of the cylinder. The gases from the wood pass out from the upper hole in the slip, and the tar through the lower hole (both holes corresponding with holes in the retort) into pipes communicating with the furnace in which they are burnt. This saves a considerable amount of fuel. When the wood has been sufficiently charred, which is known by the violet colour of the flame from the burning gas, indicating the formation of carbonic oxide, the slip is withdrawn by tackling placed in a large iron case or cooler, covered with a close-fitting lid, and allowed to remain until all the fire is extinguished, which takes about four hours; and the charcoal is then emptied into smaller coolers and sent to store. The charcoal is carefully looked over and picked by hand, to see that it is all properly and evenly burnt, and that no rivets from the slips have broken off. It is then kept from ten days to a fortnight in store, before being ground, to obviate the danger of spontaneous combustion, to which charcoal is liable when ground directly after burning. This arises from the heat generated by the very rapid absorption and condensation of oxygen from the air by the finely powdered substance. The charcoal for cannon powders is burnt a short time at a high temperature and is called Black coal. That for small arms is burnt for a longer time at a low temperature and is called red coal. "Black coal" should be jet black in colour, its fracture should show a clear velvet-like surface, it should be light and sonorous when dropped on a hard surface, and so soft as not to scratch polished copper. Slack-burnt charcoal, that is charcoal prepared at a very low temperature, is at once known by its reddish brown colour, especially when ground; this colour is distinctly perceptible in the R. F. G 2 powder up to the glazing process. Charcoal burnt at a very high temperature is known by its hardness metallic ring and greater density.

Sulphur Refining.

The Sulphur used in the process of refining is of the best quality. It undergoes a rough purification before importation, leaving about three to four per cent of earthy impurities which have to be got rid of by a second distillation. The refining apparatus is very simple. A large iron melting pot or retort is set in brickwork, about three feet above the floor, with a furnace underneath; this retort has a heavy movable lid, which is luted into the pot with clay, and in the lid is a four-inch opening, closed by an iron conical plug that can be removed at pleasure. From the melting pot, lead two pipes, at right angles to one another,

one fifteen-inch to a large circular dome, and the other five-inch to an iron receiving pot, placed below the level of the melting pot. The latter pipe has an iron casing or jacket round it, through which cold water is allowed to circulate. The communication of these pipes with the melting pot can be shut off or opened as required by valves worked from without.

The process of reflning consists of melting the grough sulphur in the melting pot and allowing it to distil over into the receiving pot, and is carried out at other factories in the following way:

About 5½ cwts. of grough sulphur is placed in the pot each morning. The fire being lighted, the conical cast-iron plug is left out of the hole in the lid of the pot, the passage into the dome is opened, and that into the receiving pot closed. The heat is maintained for three hours, till the sulphur is of a proper temperature for distillation. The vapour which first rises from the pot is of a pale yellow colour, and as much of it as passes into the dome falls down condensed as flowers of sulphur. But at the end of three hours the vapour becomes of a deep reddish brown colour, showing that the temperature of the melted sulphur has reached the proper point. The plug must then be inserted in the lid, the communication to the dome closed, and that leading to the receiving pot opened, allowing the heavy vapour to pass through the pipe surrounded with the water jacket, by means of which a constant circulation of cold water is kept up round it. In this way the sulphur vapour is condensed, and runs down into the receiving pot as a clear orange liquid resembling treacle in colour and consistency. When nearly all has passed over into the receiving pot, which can be known by the jacket getting cold, the pipe communicating with the receiving pot is again closed, and the fluid sulphur left about an hour to get sufficiently cool (not below 220°) to ladle out into the moulds (wooden tubes saturated with water to keep the sulphur out of the cracks); at the same time the furnace doors are thrown back, and the communication with the dome re-opened, so that the rest of the vapour may pass into it; the impurities all remain at the bottom of the melting pot, and are thrown away. The flowers of sulphur thus obtained, being unlit for the manufacture of gunpowder, are treated as grough sulphur. The crystalline sulphur, after being allowed to cool in the moulds, is broken up and put into barrels ready to be ground.

Refined sulphur may be tested as follows: (a) by burning a small quantity on porcelain, when the amount of residue should not exceed 25 per cent; (b) by boiling a little with water, and testing with blue litmus paper, which it should only very feebly redden. In this factory the above plan is deviated from considerably. The amount of sulphur charge put into the melting pot elsewhere is limited to 5½ cwts. because the sulphur in the course of melting reaches a temperature at which it catches fire, and, if the quantity of the charge exceeds about 5½ cwts. the flames get very violent and rush out of the top of the pot in a series of puffs like the steam escaping from a locomotive. The violence of these puffs will at times amount to an explosion of sufficient strength to blow off the lid of the pot and might do considerable damage. This flaming gradually dies out before the charge is ready for distilling. It was found here that the flaming stage could not take place when the melting pot was full of sulphur vapour, the air necessary to support combustion being thereby excluded. On this idea operations are now begun on the first day always on the

usual plan, but as soon as the process has once passed the flaming stage and the pot is full of sulphur fumes to add as much sulphur to the charge as the pot will hold. By leaving a little sulphur in the pot at the end of each day's work and keeping it warm all night the pot is full of fumes next day and can be filled up at once. The advantage of this plan is that, whereas in other factories only 5½ cwts. can be refined at one operation, 14 cwts. can be refined here, and the expenditure of fuel for the large quantity is the same as that required for the smaller quantity.

Processes of Gunpowder Manufacture.

The manufacture of gunpowder from the prepared ingredients involves nine processes with slight variations in the case of some of the very different natures of powder now being made. The first process is mixing the ingredients, which is a preparatory operation to the second process of incorporation or grinding together of the mixed ingredients whereby the explosiveness of the powder is given. The third operation is breaking down the mill-cake which is an intermediate operation to prepare the powder for pressing which is the fourth process and consists of the pressing of the powder into its desired state of uniform consistency or density as well as to make it of a convenient hardness to cut into grain. The fifth process is granulating or corning that is the breaking up of the powder into the requisite size of grain. The sixth process is dusting that is getting rid of the dust amongst the grain, as the presence of dust would interfere with the next operation of glazing that is giving a smooth surface and polish to the grain. The eighth process is stoving or drying that is getting rid of the superfluous moisture in the powder, whereby, as also by glazing, the keeping qualities of the powder are given. The ninth or last process is finishing or separating, that is a final sifting of the powder.

Weighing (1).

(1) The ingredients are brought into the mixing house and are very accurately weighed out in separate scales, in mill charges (in their proper proportions to 100 lbs.) with an extra amount of saltpetre according to the moisture contained in it. The largest charge authorized for the in corporating mills for small arm powders is 50 lbs.; for cannon powders, the materials of which are not so violent in their action, and the charges worked with a greater percentage of moisture, the weight is 60 lbs.

Mixing.

After weighing the charge is placed in the mixing machine which consists of a cylindrical gun-metal or copper drum, about 2' 9" in diameter and 1' 6" wide, with an axle passing through its centre, on which there are eight rows of gun-metal flyers like forks. The machinery is so arranged that the flyers and drum revolve in opposite directions, the drum making in a minute about forty revolutions and the flyers eighty. The ingredients are mixed for about five minutes; the machine then empties itself into a box, and the composition is passed through an eight-mesh copper-wire hand sieve over a hopper, in order to catch any splinter of wood, small copper nail, or other foreign substance which may have got into the saltpetre during the process of refining; it runs into a bag placed

below the hopper, and is tied up ready for the incorporating mills. In this state it is called a "green" charge.

Incorporation (2).

(2) The incorporating mill consists of a circular iron bed about seven feet in diameter whereon two iron rollers revolve. These are about six feet in diameter with edges fifteen inches wide weighing each about four tons.

They make eight or nine revolutions round the bed each minute. The bed has a rim on the outside, called the curb, and on the inside an edge formed by the cheese or socket through which the vertical shaft passes. The runners are not equidistant from the centre of the shaft; one works the part of the charge nearest the centre of the bed, the other the outer part, but their paths overlap; two ploughs of wood, covered with leather, attached to the cross-head by arms or brackets, one working next the vertical shaft, the other next to the curb, throw the composition under the runners, as it works away from them.

The green charge is brought in its bag and spread evenly on the bed of the mill by means of a wooden rake, the mill bed having been previously moistened with water. Each charge is worked about $3\frac{1}{2}$ hours for R. F. G. powder and six hours for R. F. G. 2; cannon powders require less milling.

Amount of Liquor.

The charge when placed on the bed of the mill contains about two pints of water (the moisture of the saltpetre) and a further quantity of from two to fifteen pints including that first passed in the mill bed (of distilled water) is added from time to time, according to the state of the atmosphere, to facilitate the incorporation and reduce the effect of an explosion. If too wet, the runners would lick up the composition from the bed. During the time of working the charge, the millman enters the mill occasionally, takes a wooden shover and pushes the outside of the charge into the middle of the path of the runners so that every portion may be regularly incorporated. The action of the runners is a combination of rolling and twisting, and has on a large scale somewhat the effect of a pestle and mortar, crushing rubbing and mixing, thus giving the charge a most intimate union.

Drenching Apparatus.

Each mill has a flat wooden lever board or shutter, directly over its bed, in gear with a cistern of water, and so arranged that when the shutter is in the least degree raised on its pivot by an explosion, the cistern is upset into the bed, and the charge drowned. A horizontal shaft connects all the shutters in a group of mills, so that the explosion of one mill drowns all the remainder. The cistern can also be pulled over by hand.

Mill-cake.

When the charge, which in this state is called mill-cake, is ready to be taken off the mill, it should be uniform in colour, not having any specks of either saltpetre or sulphur visible to the eye, and of a grayish or brownish colour, according to the charcoal used. When a small piece is broken in the hand and thrown on to the rim or curb of the mill a portion of dust should rise. The incorporation should be carefully attended to by experienced men as the strength and general characteristics of the powder depend more upon this process than on any of the others. The mill-cake is carefully tested every day to ascertain whether it contains the proper amount of moisture; this should be $1\frac{1}{2}$ to 3 per cent for small arm powders, and 3 to 4 per cent for the larger descriptions of gunpowder.

Breaking down the Mill-cake (3).

(3) The mill-cake on being taken off the bed of the mill is placed in wooden tubs and moved to small magazines, from whence it is taken to the breaking-down house. The object of this process is to reduce the cake, which is now partly in lumps and partly in powder, to a uniform meal, in order that it may be in a convenient form for loading the press-box. Breaking down is done by hand, the press cake being beaten by wooden mallets on a tray till it is reduced to meal, when it is ready for the press.

Pressing (4).

(4) The press-box is a very strong oak box, with gunmetal frame, 2' 6" square and 2' 9" deep, so constructed that three of the sides can turn back on hinges, or form a compact solid box when screwed firmly together. Being laid on its side, the real top temporarily closed by means of a board, and the uppermost side alone open, a number of copper or gunmetal plates, 2' 5½" square, are placed vertically into this box, and kept apart at a distance (depending on the description of powder required) by two gunmetal racks, with corresponding grooves, which can be removed when no longer required. In pressing the thicker slabs for pebble powder which have to be afterwards cut into cakes, the press-box is divided vertically by a partition into two parts, a corresponding division being made in the fixed press block.

About 600 lbs. of meal is put into the press-box, while the plates are in a vertical position, and rammed evenly down by means of wooden laths. When full, the racks are withdrawn, the plates being only separated by the meal between them; the present upper side is firmly screwed down with short gunmetal screws, and the box turned over, so that the plates are now horizontal; the temporary lid is taken off, and the block run forward into position above the box. The pumps, which work the hydraulic press in a separate house, are now set in motion and the box is raised until the necessary amount of compression has been given, according to the density required. For this purpose the block is allowed to enter the box a certain distance, which is measured by a scale marked on the block. This mode of regulating the pressure gives more reliable results than trusting to the indicator gauge of the hydraulic ram, for the reason that the elasticity or resistance to pressure of the meal varies considerably with the amount of moisture present in it and the state of the atmosphere. To get uniform density equal quantities of meal, containing equal amounts of moisture, have to be compressed at the same rate into the same space. In practice,

however, the moisture in the meal will vary slightly, whatever care be taken, and even if the mill-cake were always taken off the bed perfectly uniform in this respect, the hygrometric state of the atmosphere would cause a difference by the time it came to the press. Moreover, it is found that atmospheric conditions have an influence upon the manner in which powder meal can be compressed, even apart from the actual percentage of moisture contained in it, so that the exact distance the press block is allowed to enter the box has to be varied with the season, and even the prevailing state of the weather.

After the required pressure has been given a valve is opened to let out the water from the cylinder of the press, and the press-box descends till it is free of the block. The latter is then pushed back and the box is turned over on its side to be unloaded. The three movable sides being unscrewed and laid back the press cake is taken out, in layers of nearly ½ an inch thick for the smaller powders, after which it is broken down into coarse grain between metal rollers. For pebble powder the layers or slabs are 5/8 of an inch thick and are kept intact for the next operation.

Granulating or Corning (5)

(5) The granulating or corning machine consists of two parts. One is a series of three pairs of metal rollers so arranged one beneath the other as to gradually break down the coarse grain received from the press house to the required size for the description of powder being made. The top pair of rollers are placed under a hopper so that all the powder poured into the hopper passes between them. From this pair (which are not set very close together) the powder is conveyed down an inclined plane to the second pair, which are set rather closer together, and so on to the third pair, which are set so close as to give the exact amount of crushing required. The second part of the machine consists of a set of sieves on a square frame, which is violently shaken laterally. The grain which has passed the third pair of rollers is thrown on this frame and falls on the top sieve. Any grain which is too large does not pass this sieve and is shaken into a receptacle placed to receive it, while all the rest falls through the sieve and is caught on one below, which is of rather finer mesh retaining all the grain of the proper size. This is shaken into another receptacle placed for it, while the grain that is too fine passes the lower sieve to a third receptacle, The proper size grain, then called foul grain, passes on to the next operation, while all that is too big or too small is called dust and sent back to the incorporating mills, where it is milled about forty minutes previous to being mixed with green charges and sent to the press again. In this and in all subsequent operations a quantity of dust accumulates which is all sent back to the incorporating mills to be treated in the same manner.

Cube-cutting Machine.

Pebble powder is granulated, or cut, in a special machine, which cuts the press-cake first into strips, and then again, crossways, into cubes of % length of edge. This is done by two sets of phospher bronze rollers, which have straight cutting edges arranged along their surfaces, and which are set at right angles to each other; an ingenious arrangement

causing the long strips cut by the first pair to travel endways to the second pair to be cut into cubes.

Dusting (6).

(6) Dusting is performed in horizontal or slope reels. These are large cylindrical sieves about eight feet long by two feet in diameter, which revolve with about forty revolutions a minute, inside wooden cupboards. In the case of horizontal reels, the foul grain from the granulating machine is put inside them, and run for some time to get rid of the dust. This falls through the sieve to the bottom of the cupboard, whence it goes back to the incorporating mills as "dust." When the powder that remains in the sieve is fairly free from dust, one end of the reel is lowered and opened to allow the powder to be run out into tubs. A slope reel has one end permanently lower than the other, and open; the powder is poured in at the upper end from a hopper, and, as the reel revolves, gradually travels to the lower end, whence it falls out into tubs placed for its reception. Horizontal reels are generally used for the double purpose of getting rid of dust, and rubbing the edges off the grain, as also sometimes for polishing; while slope reels are only used for getting rid of dust. The horizontal reels are very little used in this factory. For pebble powder, a peculiar slope reel with a copper wire mesh of suitable size is placed in connection with the cube-cutting machine, so that all the cubes pass through it before running into the tubs placed for their reception.

Glazing (7).

(7) Glazing is performed in large wooden barrels which revolve on a horizontal axis. In these barrels about 400 lbs. of powder are placed, and the barrels are made to revolve for several hours at rates varying according to circumstances from 14 to 35 revolutions a minute.

Stoving or Drying (8).

(8) Powders that require stoving are placed in a drying stove, which is merely a room heated by steam pipes, fitted with a number of shelves, on which' are placed shallow trays with canvas bottoms, filled with a layer of powder. The powder is thus placed to expose it as much as possible to the heat of the room. Powders of different descriptions require different degrees of heat, and that the operation be more or less prolonged according to the size of grain.

Separating (9).

(9) To finish the powder there is yet another final operation for all powders smaller than pebble powder, namely, separating. This is merely passing the powder through a large sieve shaken by machinery (somewhat on the same principle as those in the granulating house) to get rid of any dust or broken grain which may have accumulated during the glazing and drying.

Concluding Remarks on Manufacture.

So far the general principles on which the different processes of powder-making are worked have been described, and only here and there has any mention been made of the variations in manufacture necessary to produce different descriptions of gunpowder. It remains therefore to explain how the processes-can be varied to produce the differences necessary to make suitable powders for special purposes. As regards the ingredients themselves, their proportions are not allowed to be altered; and with this prohibition it is impossible to effect any differences in the finished gunpowder as far as saltpetre and sulphur are concerned. With the charcoal it is not so, for by using different sorts of wood, as also by varying the intensity of the heat at which the wood is burned, very great effect is produced on the strength of the powder. In consequence of this the quality of the charcoal is of great importance.

After the ingredients are mixed, the first place where the powder can be varied is the incorporating mill, where the degree of explosiveness of the powder can be regulated by the amount of milling given to the charge, as also by the amount of moisture. Next the quickness of burning can be varied by the amount of density given by the hydraulic press. The next process, the cutting into grain, depends chiefly on the state of the powder on leaving the press. If it is right in density and moisture, it will cut into good firm grain; while if it is too hard or soft, too dry or wet, it will crumble, or clog, or cut into flaky grain, In the after processes of dusting and glazing some alteration can be made in the powder, chiefly by varying the length of glazing and the pace at which the glazing barrels revolve. The chief characteristics of the powder however have been given to it by the time it has left the press.

After a convenient quantity of gunpowder has been made, generally amounting to between ten and fifteen thousand lbs., it is proved as described below. If it passes the proof it is put into barrels of a capacity of fifty or a hundred pounds, and delivered to the Ordnance Authorities for use in the Government service. If it does not pass, it is modified by mixing, or re-worked as the case may require.

Examination and proof of Gunpowder.

The tests to which powder is subjected are intended to ascertain nine points. The first point is that the powder should have a proper colour, a proper amount of glaze, a sufficiently hard and crisp texture, and freedom from dust. These points can be judged by the hand and eye alone, and require a certain amount of experience in the examiner. The cleanness of the powder can be easily tested, by pouring a quantity from a bowl held two or three feet above the barrel in a good light. If there be any loose dust it will be readily detected.

The second point to test is whether it is properly incorporated. This is tested by flashing; that is, burning a small quantity on a glass, porcelain, or copper plate. The powder is put in a small copper-cylinder, like a large thimble, which is then inverted on the flashing plate. This provides for the particles of powder being arranged in pretty nearly the same

way each time, which is very important. If the powder has been thoroughly incorporated, it will flash or puff off when touched with a hot iron, with but few lights or sparks, and leaving only some smoke marks on the plate. A badly incorporated powder will give rise to a quantity of sparks, and also leave specks of undecomposed saltpetre and sulphur forming a dirty residue. Although a very badly worked powder could be at once detected, yet, as a comparative test, flashing needs an experienced eye to form an accurate judgment. Powder once injured by damp will flash very badly, no matter how carefully it may have been incorporated. This arises from a partial solution of the saltpetre.

The third point to test is the size, shape, and proportion of the grains. The shape can be judged by the eye alone, and the size of grain, in large uniform powders cut by machinery, is usually tested in the same way or by actual measurement; but a granulated powder can usually be readily sifted on the two sieves which define its highest and lowest limit of size; it must all pass the one and be retained on the other. For example, the Martini-Henry (R. F. G.²) powder must pass through a sieve of twelve meshes to the inch, and be retained on one of twenty meshes. This sifting, however, conveys no idea of the proportions of different sized grains contained in the powder. For instance, a sample of R. F. G.² powder consists entirely of grains just small enough to pass the twelve-mesh sieve, or just large enough to be retained on the twenty mesh; and these two powders would give very different results. To obviate this, one pound is sifted on three sieves, a twelve-mesh, a sixteen-mesh, and a twenty-mesh, and the limits allowed are as follow:

| Pass 12-mesh to 16 mesh | | | | 12 | ozs. | |
|-------------------------|----|----|----|----|------|----|
| ,, | 16 | ,, | 20 | " | 3 | ,, |
| ,, | 20 | ,, | | ,, | 1 | ,, |
| | | | | 16 | ozs. | |

Density.

The fourth point to test is density. This is ascertained to three places of decimals by the mercurial densimeter. It must, for each description of powder, lie between certain limits as shown in the table below. Bianchi's densimeter consists of an apparatus by which the air can be exhausted from a removable glass globe, fitted with stop cocks, and mercury allowed to 611 it. The process of taking the density of gunpowder is as follows. The air being exhausted, the globe is filled with mercury, removed from the machine, and accurately weighed. The globe is then emptied, and 100 grammes of gunpowder being introduced into it, it is attached to the machine, the air exhausted, and the remainder of the globe filled with mercury under precisely the same conditions as before; its weight now represents the weight of the globe full of mercury, plus the weight of the gunpowder, and minus the weight of the mercury displaced by the powder. Thus if

S = Specific gravity of mercury at the time of experiment,

W = Weight of globe full of mercury alone, and

W=Weight of globe filled with powder and mercury,

Density of the gunpowder
$$S \times 100$$

= $(W-W)+100$

Moisture.

The fifth point to ascertain is moisture. The powder must contain a percentage of moisture between limits laid down for each description. The amount of moisture is ascertained by drying a carefully weighed sample in a water oven until there is no further loss of weight; from the weight lost, the percentage of moisture can be calculated.

Firing Proof.

The sixth point to ascertain is firing proof for muzzle velocity and pressure in bore of gun. Each gunpowder is tested with the arm in which it is intended to be used and must give an initial velocity between limits laid down; the velocities are taken with the LeBoulenge electric chronograph. The particulars for each nature of powder are given in the table below.

Cannon powders must, in addition, give a pressure in the bore, as measured by crusher gauges inserted in the proof gun, not exceeding a certain amount the square inch. A crusher gauge is a small cylinder of copper half an inch in length and one-twelfth of a square inch in sectional area, which is so placed in a hole in the gun as to be compressed by the violence of the explosion on the gun being discharged. From the amount of compression the amount of pressure per square inch on the interior of the bore can be calculated.

The seventh point to ascertain is if the proportions of the ingredients are correct. This is ascertained by a chemical analysis. See below chemical test of powder.

The eighth point to ascertain is the power of the powder to withstand absorption of moisture. This consists in subjecting dried samples of gunpowder in a box, kept at a uniform temperature, the air inside which is charged with moisture to a known degree, by means of a certain quantity of a saturated solution of saltpetre. The samples are weighed at regular intervals to ascertain the rapidity with which the moisture is absorbed by the powder.

The following table gives the densities and muzzle velocities, &c., for Service (Rifle) Powders:

| | Velocity. | Pressure | Density | Hygroscopic Test. | Moisture. | Size of Grain. | Proportion of Grain. |
|-----------------------|-----------|----------|---------|----------------------|-----------|-------------------|----------------------|
| Pebble ² . | Not less | Not | Should | - | Not to | The | The lumps |

| | than 1540 feet. | exceeding 22 tons. | not be less than 1.75. | | contain more than 1.3 nor less than 10 percent. | powder is not to be pressed in individual masses or cubes but granulated from press cake 1½" thick. | to be of fairly uniform size and shape varying in number from 6 to 7 in a lb. They should be cubical with rounded edges. |
|--------------------------|--|------------------------------|------------------------------|---|--|--|--|
| Pebble. | Not less than 1450 feet. | Not exceeding 20 tons. | Not less than 1.75. | Must not absorb more than 1.0 per cent in 48 hours. | Not more than 1.3 nor less than 1.0 percent. | Must pass through 3/4 inch mesh sieve and be retained on a 3/8 inch mesh sieve. | The lumps should be cubical with rounded edges clean and glazed and should number 80 to the lb. |
| R. L. G. ³ | Not less than 1540 feet. | Not exceeding 15 tons. | Not less than 1.70. | Must not absorb more than 2 per cent in 24 hours. | Not less than 1 nor more than 1.2 percent. | Must pass through a 2-mesh sieve and be retained on a 3- mesh sieve. | A portion of the powder not exceeding A part of the whole must pass through the 6-mesh sieve clean and glazed. |
| R. L. G ² | Not less than 1380 or more than 1430 feet. | Not exceeding 15 tons. | Not less than 1.65. | Must not absorb more than 1.5 per cent in 24 hours. | than 1.00 nor more than 1.2 | Must pass through a sieve of 3 meshes to the linear inch and be retained | Same as for R. L. G. ² |

| | | | | | on a 6- mesh sieve. | |
|----------|--|-----------------|--|--|--|--|
| R. L. G. | Not less than 1385 nor more than 1438 feet. | No standard. | Not exceeding 1.690 nor less than 1.670. | Must not absorb more than 2.00 per cent In 24 hours. | Must pass a sieve of 4 meshes to the inch and be retained on one of 8 meshes to the inch. | Will be sifted on a 4-mesh 6-mesh and 8-mesh sieve to ascertain if the different sizes of grain are present in the proper proportion. At least 3/4 of each sample must be retained on a 6-mesh sieve and the remaining 4th on a 8-mesh sieve |

| | Velocity. | Pressure. | Density. | Hygroscopic Test. | Moisture. | Size of Grain. | Proportion of Grain. |
|---------------------|---|-----------|---|------------------------|---|-------------------------------------|--|
| R.F.G. ² | Muzzle Velocity. Not under 1310 F. S. 1300 ,, 1290 ,, Percentage of moisture. 0.9 to 1.0 | | Must not exceed 1.75 nor be less than 1.72 | absorb more than 2. 76 | Must not contain less than 0.9 nor more than 1.2 percent. | To be from 1/12 to 1/16 of an inch. | The whole must pass through a 11-mesh sieve. Out of 10 parts, 12 should be retained on a 16-mesh sieve; of the remainder |

| | 1.0 to 1.1 1.1 to 1.2 | | | | not less than 8 parts should be retained on a 20-mesh sieve and one part may be allowed to pass a 20- mesh sieve. |
|--------|--|--|---|--|---|
| R.F.G. | Must not be less than 1260 nor more than 1290 feet. | Must not exceed 1.62 nor be less than 1.58. | Should nut absorb more than 2.5 per cent in 24 hours. | 20 meshes. A small quantity | The whole must pass a 12-mesh sieve. Out of 16 parts not less than 10 must be retained on a 16-mesh sieve and of the remainder not less than 4 parts must be retained on a 20-mesh sieve. |

Chemical Analysis of Gunpowder.

Moisture.—About eighty grains of the crushed powder are weighed in a pair of watch glasses with ground edges so as to fit closely over each other. The watch glass containing the powder without its cover is then placed in a dessiccator over oil of vitriol, and the loss of weight is noted every twenty-four hours until a constant weight is obtained.

Sulphur.—From ten to twelve grains are oxidised completely by digestion at a gentle heat with strong nitric acid and chlorate of potash. The excess of nitric acid is then driven off by evaporation to dryness, and the residue dissolved in water. To the solution chloride of barium is added, and the precipitated sulphate of baryta completely washed by repeated boiling with small quantities of water.

Saltpetre or Nitre.—About eighty grains are treated with boiling water, and the dissolved nitre, after filtration from the sulphur and charcoal, is evaporated to dryness and weighed.

Charcoal.—The quantity of this ingredient is represented by the amount required to make up a hundred parts after deducting the percentage of sulphur and nitre found.

Good powder consists in a hundred parts of the dry powder of seventy five parts of nitre, ten parts of sulphur, and fifteen parts of charcoal. The moisture should be 1.00 per cent. of the powder in its ordinary condition.